

Lance A. Termes (lance.termes@alston.com) (Wa. Bar No. 29729)

**ALSTON & BIRD LLP**

1950 University Avenue, 5th Floor

East Palo Alto, CA 94303-2282

Telephone: 650-838-2000

Facsimile: 650-838-2001

James C. Grant (jim.grant@alston.com)\*\*

Valarie C. Williams (valarie.williams@alston.com)\*\*

B. Parker Miller (parker.miller@alston.com)\*\*

Edward P. Bonapfel (ed.bonapfel@alston.com)\*\*

**ALSTON & BIRD LLP**

1201 West Peachtree Street

Atlanta, Georgia 30309

Telephone: 404-881-7000

Facsimile: 404-881-7777

*\*\*Pending Pro Hac Vice Admission*

*Attorneys for Plaintiffs Microsoft Mobile Inc. and Microsoft  
Mobile Oy*

**UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF WASHINGTON  
SEATTLE DIVISION**

MICROSOFT MOBILE INC. AND  
MICROSOFT MOBILE OY,

Plaintiffs,

v.

LG CHEM AMERICA, INC., LG CHEM,  
LTD., PANASONIC CORPORATION,  
PANASONIC CORPORATION OF NORTH  
AMERICA, SAMSUNG SDI AMERICA,  
INC., SAMSUNG SDI CO., LTD., SANYO  
ELECTRIC CO. LTD., SANYO NORTH  
AMERICA CORPORATION, SONY  
CORPORATION, SONY ELECTRONICS,  
INC., AND SONY ENERGY DEVICES  
CORPORATION,

Defendants.

Case No.: 2:15-cv-1038

**COMPLAINT FOR DAMAGES  
AND INJUNCTIVE RELIEF**

**JURY DEMAND**

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Plaintiffs Microsoft Mobile Inc. and Microsoft Mobile Oy (collectively “Microsoft Mobile” or “Plaintiffs”) bring this action for damages and injunctive relief under Sections 4 and 16 of the Clayton Act based on Defendants’<sup>1</sup> conspiracy to fix, raise, stabilize, and maintain prices for Lithium Ion Battery Cells and Lithium Ion Batteries that ran from at least January 1, 2000 through at least May 31, 2011 (“the Conspiracy Period”). Two Defendants, Sanyo Electric Co., Ltd. and LG Chem Ltd., have already pled guilty to price-fixing charges in connection with the investigation by the Antitrust Division of the United States Department of Justice (“DOJ”) into criminal antitrust violations in the Lithium Ion Battery market.<sup>2</sup> Many other companies and consumers injured by the conspiracy have filed similar claims. Those lawsuits have been consolidated for pretrial purposes in *In re Lithium Ion Batteries Antitrust Litigation*, Case No. 13-md-02420 in the Northern District of California (Oakland Division) (“Batteries MDL”).<sup>3</sup>

## A. INTRODUCTION

1. Defendants engaged in a massive conspiracy to fix, raise, stabilize, and maintain the prices of Lithium Ion Batteries and Cells for at least the 11-year Conspiracy Period. Nokia Inc. and Nokia Corporation (“Nokia”) purchased significant volumes of Lithium Ion Batteries directly from Defendants during the Conspiracy Period. The conspiracy artificially inflated the price of Lithium Ion Batteries purchased by Nokia in the United States and throughout the world. Microsoft Mobile acquired the claims in this case following the acquisition of Nokia Corporation’s mobile device business.

2. Defendants engaged in continuous contact with each other for the purpose of exchanging confidential competitively-sensitive information that enabled them to set prices collusively. Defendants

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<sup>1</sup> LG Chem, Ltd., LG Chem America, Inc., Samsung SDI Co., Ltd., Samsung SDI America, Inc., Panasonic Corporation, Panasonic Corporation of North America, Sanyo Electric Co., Ltd., Sanyo North America Corporation, Sony Corporation, Sony Energy Devices Corporation, and Sony Electronics, Inc.

<sup>2</sup> On September 20, 2013 and October 10, 2013, Sanyo Electric Co., Ltd. and LG Chem Ltd., respectively, pled guilty to conspiring to fix prices of cylindrical Lithium Ion Battery Cells in violation of Section 1 of the Sherman Act. (Case No. 13-cr-472, Dkt. No. 32.; Case No. 13-cr-472, Dkt. No. 28.).

<sup>3</sup> Indirect Purchaser Plaintiffs (“IPPs”) and Direct Purchaser Plaintiffs (“DPPs”) have asserted claims for antitrust injuries against Defendants in the Batteries MDL. The IPPs’ Third Consolidated Amended Class Action Complaint is filed at Docket Number 519 and the DPPs’ Second Amended Consolidated Class Complaint is filed at Docket Number 415.

1 reached customer-specific and product-specific agreements on price, including setting price targets and  
2 bottom prices, and coordinated output restrictions. As part of this illegal conduct, Defendants  
3 specifically targeted Nokia and its purchases of Lithium Ion Batteries.

4 3. Defendants and their co-conspirators initially began meeting with each other in or around  
5 1999 with a common goal of cooperating to avoid price competition. At these meetings, Defendants and  
6 co-conspirators discussed confidential and competitively-sensitive information regarding, among other  
7 things, supply and demand, market trends, capacity, sales forecasts, and pricing for Lithium Ion  
8 Batteries. These semi-annual meetings typically occurred in February/March and July/August and lasted  
9 several hours. Defendants and their co-conspirators also participated in other meetings, telephone calls,  
10 and email exchanges where they reached agreements on pricing and market allocations. These meetings  
11 continued until at least May 2011.

12 4. Plaintiffs bring this action to recover for injury to their business and property and other  
13 harms arising from their purchases of Lithium Ion Batteries at artificially inflated prices over several  
14 years. Because of this price-fixing conspiracy, Nokia paid higher prices for Lithium Ion Batteries than it  
15 would have paid in a competitive market as a direct result of Defendants' and their co-conspirators'  
16 unlawful conduct.

17 5. Plaintiffs are entitled to recover for overcharges on all Lithium Ion Batteries Nokia  
18 purchased directly from Defendants or their Co-Conspirators. Lithium Ion Batteries are essential  
19 components of mobile telecommunications devices, such as those produced by Nokia during the  
20 Conspiracy Period. Nokia purchased billions of dollars' worth of Lithium Ion Batteries from  
21 Defendants during that Period. Defendants shipped a significant portion of those Lithium Ion Batteries  
22 directly to Nokia into the United States. While Nokia suffered other damages caused by Defendants'  
23 worldwide conspiracy, Plaintiffs only seek damages related to Lithium Ion Batteries shipped by  
24 Defendants to the United States in this case.

## 25 **B. DEFINITIONS**

26 6. Lithium Ion Batteries ("Battery" or "Batteries") are cylindrical, prismatic, or polymer  
27 batteries incorporating rechargeable Lithium Ion Battery Cells. As used in this Complaint, "Battery"  
28

1 refers to both the Lithium Ion Battery and to the Lithium Ion Battery Cell(s) packed within it. Lithium  
 2 Ion Batteries are an important source of portable energy for many products, such as notebook  
 3 computers, mobile phones, personal digital assistants, smart phones, digital cameras, camcorders, power  
 4 tools, and other devices.

5 7. Lithium Ion Battery Cells (“Cell” or “Cells”) are the main components of Lithium Ion  
 6 Batteries. As explained in more detail below, a cell includes the cathode, anode, and electrolyte.  
 7 Individual or multiple cells are assembled or “packed” inside an enclosure. In some cases, certain  
 8 protection circuitry is also added inside the enclosure.

### 9 C. JURISDICTION AND VENUE

10 8. Plaintiffs bring this action under Section 1 of the Sherman Act, 15 U.S.C. § 1, and  
 11 Sections 4 and 16 of the Clayton Act, 15 U.S.C. §§ 15 and 26.

12 9. Pursuant to 28 U.S.C. §§ 1331 and 1337, the Court has jurisdiction over Nokia’s claims  
 13 under Section 1 of the Sherman Act and Sections 4 and 16 of the Clayton Act.

14 10. The activities of Defendants and their Co-Conspirators, as described herein, were within  
 15 the flow of, were intended to, and did have a direct and substantial effect on United States commerce.

16 11. This Court has *in personam* jurisdiction over each Defendant because each Defendant,  
 17 either directly or through the ownership and/or control of its United States subsidiaries: (a) transacted  
 18 business in the United States and in this District; (b) sold or marketed substantial quantities of Cells and  
 19 Batteries throughout the United States, including Cells and Batteries Defendants knew would be sold  
 20 and shipped into this District; (c) had substantial aggregate contacts with the United States as a whole;  
 21 (d) was engaged in a price-fixing conspiracy that had an effect on commerce in the United States,  
 22 including commerce in this District; and/or (e) purposefully availed itself of the laws of the United  
 23 States, including the laws of Washington.

24 12. Venue is proper in this District pursuant to Section 12 of the Clayton Act (15 U.S.C.  
 25 § 22), because Defendants reside, can be found, and/or transact business in this District, and pursuant to  
 26 28 U.S.C. §§ 1391 (b)(1), (c), and (d) because all Defendants are subject to this Court’s personal  
 27 jurisdiction with respect to this civil action.  
 28

13. Plaintiffs' action is related to the case captioned *In re Lithium Ion Batteries Antitrust Litigation*, Case No. 13-MD-02420 (YGR) (N.D. Cal.) ("MDL"). This action concerns substantially the same parties, transactions, and events as the claims in Case No. 13-MD-02420 (YGR) insofar as it involves a suit for damages arising out of Defendants' conspiracy to fix the price of Lithium Ion Battery Cells and Batteries in violation of Section 1 of the Sherman Act, 15 U.S.C. § 1. This action should be consolidated in Case No. 13-MD-02420 (YGR) for all pretrial purposes.

#### **D. THE PARTIES**

##### **1. Plaintiffs**

14. Microsoft Mobile Inc. is a corporation organized and existing under the laws of the State of Delaware, with its registered agent at 2711 Centerville Road, Suite 400, Wilmington DE, 19808. Microsoft Mobile Inc. was once Nokia Inc. As a result of a 2013 Stock and Asset Purchase Agreement between Nokia Corporation and Microsoft International Holdings B.V., which then assigned the Stock and Asset Purchase Agreement to Microsoft Mobile Oy, Nokia Inc. became a direct subsidiary of Microsoft Mobile Oy. Microsoft Mobile Oy then transferred its stock in Nokia Inc. to Microsoft Corporation. Nokia Inc. then changed its name to Microsoft Mobile Inc. on April 28, 2015. Nokia Inc. purchased certain of the Batteries at issue in this Complaint. Microsoft Mobile Inc. brings claims based on those purchases.

15. Microsoft Mobile Oy is a multinational mobile phone and mobile computing device manufacturer located at Keilaranta 7, 02150 Espoo, Finland, and is a wholly owned subsidiary of Microsoft Corporation. As a result of a 2013 Stock and Asset Purchase Agreement between Nokia Corporation and Microsoft International Holdings B.V., which then assigned the Stock and Asset Purchase Agreement to Microsoft Mobile Oy, Microsoft Mobile Oy acquired claims held by Nokia Corporation based on Nokia Corporation's purchase of certain of the Batteries at issue in this Complaint. Microsoft Mobile Oy brings claims based on those purchases.

16. Collectively, Nokia purchased price-fixed Batteries from Defendants Samsung SDI, Sanyo, Panasonic, LG Chem, and Sony during the Conspiracy Period. Defendants shipped the Batteries



1 at issue in this Complaint to Nokia in the United States. The Batteries brought into the United States by  
2 Defendants from abroad were part of United States import commerce.

3 17. Counsel arguing for Defendants in the Batteries MDL acknowledged during an August 8,  
4 2014 motion to dismiss hearing that mobile phone manufacturers, like Nokia, would be appropriate  
5 direct purchaser plaintiffs because they would have “bought the batteries directly from one of the  
6 defendants and [] know[] the chain of control for the cells.”<sup>4</sup>

7 18. Defendants’ and their Co-Conspirators’ price fixing was the proximate cause of Nokia  
8 paying artificially-elevated prices for Batteries purchased during the Conspiracy Period.

## 9 **2. Defendants**

10 19. The paragraphs below identify each of the Defendants and describe the relationship of  
11 ownership or control between each Defendant conspirator and its divisions, subsidiaries, or affiliates that  
12 sold Batteries to Nokia.

### 13 **a. LG Chem Defendants**

14 20. Defendant LG Chem, Ltd. is a Korean corporation headquartered at LG Twin Towers  
15 128, Yeoui-daero, Yeongdeungpo-gu, Seoul, 150-721, Korea. LG Chem, Ltd. is an affiliate of Seoul-  
16 based conglomerate LG Electronics, Inc. LG Chem, Ltd. is one of the world’s leading manufacturers of  
17 Batteries. As explained in detail below, LG Chem, Ltd., including through its subsidiaries and affiliates,  
18 participated in the conspiracy alleged in this Complaint and manufactured, marketed, and/or sold  
19 Batteries that were purchased by Nokia in the United States during the Conspiracy Period.

20 21. Defendant LG Chem America, Inc. is a Delaware corporation headquartered at 910  
21 Sylvan Avenue, Englewood Cliffs, New Jersey 07632. LG Chem America, Inc. is a wholly-owned  
22 subsidiary of LG Chem, Ltd. As explained in detail below, LG Chem America, Inc., including through  
23 its subsidiaries and affiliates, participated in the conspiracy alleged in this Complaint and manufactured,  
24 marketed, and/or sold Batteries that were purchased by Nokia in the United States during the Conspiracy  
25 Period.

26  
27 <sup>4</sup> Transcript of Proceedings at 7, *In re Lithium Ion Batteries Antitrust Litigation*, No. 13-md-  
28 02420, Dkt. No. 502 (N.D. Cal. Aug. 8, 2014).

22. Defendants LG Chem, Ltd. and LG Chem America, Inc. are collectively referred to herein as “LG Chem.”

**b. Samsung SDI Defendants**

23. Defendant Samsung SDI Co., Ltd. is a Korean corporation headquartered at 150 – 20 Gongse-Ro, Giheung-Gu, Yongin-si, Gyeonggi-do, Korea. Samsung SDI Co., Ltd. is one of the world’s largest manufacturers of Batteries. As explained in detail below, Samsung SDI Co., Ltd., including through its subsidiaries and affiliates, participated in the conspiracy alleged in this Complaint and manufactured, marketed, and/or sold Batteries that were purchased by Nokia in the United States during the Conspiracy Period.

24. Defendant Samsung SDI America, Inc. is a California corporation with its principal place of business at 3655 North First Street, San Jose, California, 95134 U.S.A. Samsung SDI America, Inc. is more than 90% owned by Samsung SDI Co., Ltd., with the remainder owned by another Samsung SDI affiliate. As explained in detail below, Samsung SDI America, Inc., including through its subsidiaries and affiliates, participated in the conspiracy alleged in this Complaint and manufactured, marketed, and/or sold Batteries that were purchased by Nokia in the United States during the Conspiracy Period.

25. Defendants Samsung SDI Co., Ltd. and Samsung SDI America, Inc. are collectively referred to herein as “Samsung SDI.”

**c. Panasonic Defendants**

26. Defendant Panasonic Corporation, formerly known as Matsushita Electric Industrial Co., Ltd. (“MEI”), is a Japanese corporation headquartered at 1006, Kadoma, 571-0050 Kadoma 571-0050, Osaka, Japan. On information and belief, during the Conspiracy Period, Matsushita Battery Industrial Co., Ltd. (“MBI”) was a wholly-owned subsidiary of MEI. MBI manufactured and sold Batteries. According to the minutes of an August 8, 2008 meeting between executives of LG Chem and Panasonic, Panasonic General Manager Matsumoto explained that “[i]nvestment in the new factory was led by mother company, Matsushita Electric Industrial, and the top management of Matsushita Electric Industrial has strong will in the battery biz.” MEI and MBI are collectively referred to herein as “Matsushita.”

27. On information and belief, effective October 1, 2008, MEI changed its name to Panasonic Corporation, and MBI became an internal division of Panasonic Corporation, operating within Panasonic Corporation's Energy Segment. On information and belief, according to Panasonic Corporation's Annual Securities Report for the fiscal year ending March 31, 2013, Panasonic Corporation has manufacturing facilities for Batteries at its Osaka Plant in Moriguchi-shi, Osaka, and its Suminoe Plant at Suminoe-ku, Osaka-shi, Osaka. That report further states, "[f]or production, the Company and its subsidiaries and affiliates are responsible as a manufacturer for each product." Panasonic Corporation is one of the world's leading manufacturers of Batteries. As explained in detail below, Panasonic Corporation, including through its subsidiaries and affiliates, participated in the conspiracy alleged in this Complaint and manufactured, marketed, and/or sold Batteries that were purchased by Nokia in the United States during the Conspiracy Period.

28. Defendant Panasonic Corporation of North America, formerly known as Matsushita Electric Corporation of America, is a Delaware corporation with its principal place of business at 2 Riverfront Plaza, Newark NJ 07102-5490, U.S.A. Panasonic Corporation of North America is a wholly-owned subsidiary of Panasonic Corporation. According to Panasonic Corporation's Annual Securities Report for the fiscal year ending March 31, 2013, Panasonic Corporation of North America is one of Panasonic Corporation's principal consolidated subsidiaries. Panasonic Corporation has 100% of the voting rights in Panasonic Corporation of North America. Panasonic Corporation and Panasonic Corporation of North America share an interlocking directorate, meaning that Panasonic Corporation's "employees concurrently hold position of directors or officers" in Panasonic Corporation of North America. For example, during the Conspiracy Period, Yoshihiko Yamada served as an Executive Officer of Panasonic, Director of Corporate Management Division for North America, and Chairman, Panasonic Corporation of North America. Panasonic Corporation of North America entered into agreements with U.S.-based customers calling for the customers to indemnify not only Panasonic Corporation of North America, but also "its divisions, parent, subsidiaries and affiliates, and their respective officers and directors" for liabilities caused by Batteries and/or Cells sold by Panasonic Corporation of North America. Panasonic Industrial Company and Panasonic Consumer Electronics Company are divisions of Panasonic Corporation of North America. As explained in detail below, Panasonic Corporation of

1 North America, including through its subsidiaries and affiliates, participated in the conspiracy alleged in  
 2 this Complaint and manufactured, marketed, and/or sold Batteries that were purchased by Nokia in the  
 3 United States during the Conspiracy Period.

4 29. Defendants Panasonic Corporation and Panasonic Corporation of North America, as well  
 5 as all predecessor entities, and subsidiaries, are collectively referred to herein as “Panasonic.”

6 **d. Sanyo Defendants**

7 30. Defendant Sanyo Electric Co., Ltd. is a Japanese corporation headquartered at 5-5  
 8 Keihan-Hondori 2-chome, Moriguchi City, Osaka 570-8677, Japan. Sanyo Electric Co., Ltd. is one of  
 9 the largest manufacturers and suppliers of Batteries in the world. In December 2009, Panasonic  
 10 Corporation completed acquisition of a majority of the voting stock of Sanyo Electric Co., Ltd.; Sanyo  
 11 Electric Co., Ltd. and its subsidiaries became consolidated subsidiaries of Panasonic Corporation. Sanyo  
 12 Electric Co., Ltd. became a wholly-owned subsidiary of Panasonic Corporation on April 1, 2011. Sanyo  
 13 Energy (USA) Corporation is a subsidiary of Sanyo Electric Co., Ltd. Sanyo Soft Energy Company was  
 14 a division of the Components and Device Business Group of Sanyo Electric Co., Ltd. Sanyo Mobile  
 15 Energy Company is a division of the Component Group of Sanyo Electric Co., Ltd. Sanyo Electric Co.  
 16 monitored its subsidiaries’ business development functions and directed subsidiaries such as Sanyo  
 17 Energy (USA) Corporation to handle certain accounts to the exclusion of other Sanyo subsidiaries. On  
 18 information and belief, Sanyo Electric Co., Ltd., including Sanyo GS Soft Energy Co., Ltd. (“GS Soft  
 19 Energy”)—its joint venture with GS Yuasa Corporation—and its other subsidiaries and affiliates,  
 20 participated in the conspiracy alleged in this Complaint and manufactured, marketed, and/or sold  
 21 Batteries that were purchased by Nokia in the United States during the Conspiracy Period.

22 31. Defendant Sanyo North America Corporation is a Delaware corporation with its principal  
 23 place of business at 2055 Sanyo Avenue, San Diego, California 92154. Sanyo North America  
 24 Corporation was a wholly-owned subsidiary of Sanyo Electric Co., Ltd. In December 2009, Sanyo North  
 25 America Corporation became an indirect, consolidated subsidiary of Panasonic Corporation. On April 1,  
 26 2011, Sanyo North America Corporation became an indirect, wholly-owned subsidiary of Panasonic  
 27 Corporation. Sanyo North America Corporation, including through its subsidiaries and affiliates,  
 28

1 participated in the conspiracy alleged in this Complaint and manufactured, marketed, and/or sold  
2 Batteries that were purchased by Nokia in the United States during the Conspiracy Period.

3 32. Defendants Sanyo Electric Co., Ltd. and Sanyo North America Corporation are  
4 collectively referred to herein as “Sanyo.”

5 **e. Sony Defendants**

6 33. Defendant Sony Corporation is a Japanese corporation headquartered at 1-7-1 Konan,  
7 Minato-Ku, Tokyo 108-0075, Japan. Sony Corporation invented the Lithium Ion Battery in 1991 and  
8 since then has been one of the world’s largest suppliers of Batteries. At various times during the  
9 Conspiracy Period, Sony Energy Company, Sony’s Core Technology & Network Company, and Sony’s  
10 Micro System Network Company were divisions and business units of Sony Corporation. As explained  
11 in detail below, Sony Corporation, including through its subsidiaries and affiliates, participated in the  
12 conspiracy alleged in this Complaint and manufactured, marketed, and/or sold Batteries that were  
13 purchased by Nokia in the United States during the Conspiracy Period.

14 34. Defendant Sony Energy Devices Corporation is a Japanese corporation headquartered at  
15 1-1 Shimosugishita, Takakura, Hiwada-machi, Koriyama-shi, Fukushima, 963-0531 Japan. Sony Energy  
16 Devices Corporation is a wholly-owned subsidiary of Sony Corporation. In or around 2009, Sony  
17 reorganized its research and development, design, manufacturing, sales, and marketing for its energy  
18 business, including Batteries, under Sony Energy Devices Corporation. As explained in detail below,  
19 Sony Energy Devices Corporation and its predecessors, including through its subsidiaries and affiliates,  
20 participated in the conspiracy alleged in this Complaint and manufactured, marketed, and/or sold  
21 Batteries that were purchased by Nokia in the United States during the Conspiracy Period.

22 35. Defendant Sony Electronics, Inc. is a Delaware corporation with its principal place of  
23 business at 16530 Via Esprillo, MZ 7180, San Diego, California 92127. Sony Electronics, Inc. is a  
24 wholly-owned subsidiary of Sony Corporation of America, Inc., which is a wholly-owned subsidiary of  
25 Defendant Sony Corporation. As explained in detail below, Sony Electronics, Inc., including through its  
26 subsidiaries, affiliates, retail stores, and online storefronts, participated in the conspiracy alleged in this  
27 Complaint and manufactured, marketed, and/or sold Batteries that were purchased by Nokia in the  
28 United States during the Conspiracy Period.

36. Defendants Sony Corporation, Sony Energy Devices Corporation, and Sony Electronics, Inc. are collectively referred to herein as “Sony.”

37. Panasonic, Sanyo, and Sony are collectively referred to at times as the “Japanese Defendants.”

38. LG Chem and Samsung SDI are collectively referred to at times as the “Korean Defendants.”

### 3. Agents and Affiliates

39. Defendants’ officers, directors, agents, employees, or representatives engaged in the conduct alleged in this Complaint in the usual management, direction, or control of Defendants’ business or affairs.

40. Defendants are also liable for acts done in furtherance of the alleged conspiracy by companies they acquired through mergers and acquisitions.

41. By referring to a corporate family or companies by a single name in this Complaint, Plaintiffs are alleging that one or more employees or agents of entities within that corporate family engaged in conspiratorial acts on behalf of every company in that family. The individual participants in the conspiratorial acts may not always have known the corporate affiliation of their counterparts, nor did they always distinguish between the entities within a particular corporate family. Customers often did not recognize these distinctions either, because Defendants marketed themselves as cohesive corporate bodies without distinction of individual entities. For instance, on information and belief, Sony advised customers that its “Li-ion Worldwide Operations” had personnel in multiple locations in the United States in addition to Japan, the United Kingdom, Korea, China, Taiwan, and Singapore. Similarly, Panasonic presented itself to customers as providing a comprehensive global team with personnel in the United States as well as Japan, China, Singapore/Malaysia, and Taiwan to provide support for the Battery business. One Panasonic employee explained, “Remember, customers view us as one Panasonic, and don’t understand our complicated organization.”

42. In addition, on information and belief, certain Japanese and Korean Defendants and their United States affiliates obscured the differences between members of their corporate families by using

the same domain names for their email addresses. For example, employees of LG Chem, Ltd. and LG Chem America, Inc. use the lgchem.com domain name for their email addresses. Similarly, Samsung SDI Co., Ltd. employees and Samsung SDI America, Inc. employees use the samsung.com domain name for their email addresses.

43. Further blurring the distinctions between the foreign parents and United States subsidiaries, on information and belief, personnel often shifted back and forth between Asian and United States entities within the same Defendant corporate family. A number of these sojourning employees engaged in collusive conduct during the Conspiracy Period and then brought their knowledge of the conspiracy with them when they moved across borders and company lines. On information and belief, what follows is a non-exhaustive list of sojourning personnel within certain Defendant corporate families that engaged in collusive conduct:

<b>LG CHEM</b>		
<b><i>Employee</i></b>	<b><i>LG Chem</i></b>	<b><i>LG Chem America</i></b>
Jae Min (Jerry) Park	Senior Manager, Notebook Business CRM Team, Battery Division 2005–07	General Manager, 2008–10
Dong Woo (Donny) Lee	Assistant Manager, Global Battery Sales, Battery Division, 2004 Assistant Manager, Notebook PC Business CRM Team, Battery Division, 2005–06 Assistant Manager, Mobile CRM Team 3, 2007–10	Assistant Manager, 2010–11 Manager, 2011
Yoo Sung (Brian) Oh	Planning Team Assistant Manager, Battery Division, 2003 Senior Manager, Notebook Business CRM Team, Mobile Energy Division, 2008–10 Senior Manager, Mobile CRM Team 2, Mobile Energy Division, 2011	Senior Manager, 2004–07



Jung Han (Jason) Park	Manager, Global Battery Sales Team, Battery Division, 2003–04 Manager, Notebook Business CRM Team, Mobile Energy Division, 2009	Manager, 2005–08
Young Sun Kim	General Manager, Mobile CRM Team 3, Mobile Energy Division, 2009	Senior Manager, 2003–07
<b>SAMSUNG SDI</b>		
<i>Employee</i>	<i>Samsung SDI</i>	<i>Samsung SDI America</i>
Y.A. (John) Oh	Sales Group General Manager, 2002–05 Vice President North America, 2006–09 Vice President Battery Marketing Team and Battery Cylinder Division, 2010	President, 2006–07 Acting President of LCD, Battery & PDP Sales, 2006–07
<b>PANASONIC</b>		
<i>Employee</i>	<i>Panasonic Corporation</i>	<i>Panasonic Corporation North America/ Panasonic Industrial Company</i>
Shuzo Yamada	Overseas Marketing & Sales Group, Assistant Leader of Panasonic Product Sales, 2003– 06	Manager, Strategic Accounts OEM Battery Administration, 2008–11 Senior Planning Manager, 2009 Senior Product Manager, 2010
Takahiro Yoshida	In charge of sales to Black & Decker and Bosch, Industrial Battery Marketing and Sales Office, 2008–11	Senior Planning Manager, OEM US Sales, Batteries Division, 2003–08 Senior Project Manager, 2007
<b>SANYO</b>		
<i>Employee</i>	<i>Sanyo Electric Co./Sanyo Mobile Energy</i>	<i>Sanyo North America Corporation/Sanyo Energy USA</i>
Takanao Matsumoto	2002–06	Vice President Global Sales, 2006–11



44. The individual participants entered into agreements on behalf of their respective corporate families. As a result, those agents represented the entire corporate family with respect to such conduct, and the corporate family was party to the agreements that those agents reached.

45. Each Defendant acted as the agent of, co-conspirator with, or joint venturer of the other Defendants and Co-Conspirators with respect to the acts, violations, and common course of conduct alleged in this Complaint. Each Defendant or Co-Conspirator that is a subsidiary of a foreign parent acted as the United States agent for Batteries, and/or Cells made by its parent company.

#### **4. Co-Conspirators**

46. Various persons, partnerships, sole proprietors, firms, corporations, and individuals not named as Defendants in this lawsuit, and individuals, both known and unknown, participated as Co-Conspirators with Defendants in the offenses alleged in this Complaint and performed acts and made statements in furtherance of the conspiracy.

47. Those Co-Conspirators include, but are not limited to, Hitachi Maxell, Ltd. and Maxell Corporation of America (“Hitachi Maxell”), GS Yuasa Corporation (“GS Yuasa”), NEC Corporation and NEC Tokin Corporation (“NEC”), and Toshiba Corporation (“Toshiba”). These Co-Conspirators, including through their subsidiaries and affiliates, participated in the conspiracy alleged in this Complaint.

#### **E. TRADE AND COMMERCE AFFECTED BY THE CONSPIRACY**

48. During the Conspiracy Period, each Defendant and Co-Conspirator, or one or more of its subsidiaries, affiliates, and/or joint ventures, sold Batteries in or into the United States in a continuous and uninterrupted flow of interstate commerce and foreign commerce.

49. During the Conspiracy Period, Defendants collectively imported more than nine hundred million dollars’ worth of Batteries directly to Nokia in the United States, which conduct constitutes United States import trade and/or import commerce.

50. Each of the Defendant groups—LG, Panasonic, Sanyo, Sony, and Samsung SDI—maintained sales and marketing arms in the United States to conduct business with major customers.

1 These Defendants are incorporated, located, and headquartered in the United States, and each does  
 2 substantial business in domestic interstate commerce throughout the United States.

3 51. For example, Defendant Samsung SDI America, Inc. stationed sales and marketing  
 4 personnel in Los Angeles, Chicago, Austin, and Houston. Those United States-based personnel reported  
 5 to Y.A. Oh, who served simultaneously as the President of Samsung SDI America, Inc. and as the Vice  
 6 President for North America of Samsung SDI Co., Ltd.

7 52. Sanyo similarly stationed sales and engineering personnel in Texas.

8 53. Sony also dispatched business and engineering personnel to its offices in the United  
 9 States.

10 54. The activities of Defendants in connection with the production, sale, and/or importation  
 11 of Lithium Ion Batteries, and the conduct of Defendants and their co-conspirators as alleged in this  
 12 Complaint: (a) constituted United States domestic interstate trade or commerce; (b) constituted United  
 13 States import trade or import commerce; and/or (c) were within the flow of and had a direct, substantial,  
 14 and reasonably foreseeable effect on United States domestic trade or commerce and/or United States  
 15 import trade or commerce. Given the marketing, importation, and sales by Defendants of Batteries in  
 16 the United States, and the volume of affected commerce, as alleged in this Complaint, such effects were  
 17 direct and substantial.

18 55. The effects of Defendants' conduct, including the artificially raised and inflated prices  
 19 that Nokia paid for Batteries during the Conspiracy Period, caused antitrust injury in the United States to  
 20 Nokia and gives rise to Plaintiffs' claims under Section 1 of the Sherman Act.

## 21 **F. LITHIUM ION BATTERIES**

### 22 **1. Lithium Ion Battery Market Development**

23 56. There are two general categories of batteries: disposable (primary) batteries, which can  
 24 be used until they are fully depleted and then discarded, and rechargeable (secondary) batteries, which  
 25 can be recharged and used for a longer period of time. Rechargeable batteries can be categorized into  
 26 five different types: (1) lead-acid; (2) nickel cadmium ("NiCd"); (3) nickel-metal hydride ("NiMH"); (4)  
 27 nickel-zinc; and (5) lithium ion.

57. Lead-acid batteries, commonly used in motor vehicles, historically dominated the market for rechargeable batteries. Over time, innovations in portable technology—such as laptop computers and mobile devices—led to a demand for rechargeable batteries that had a higher energy-to-weight/energy-to-volume ratio than lead-acid batteries. Thus, rechargeable battery manufacturers began looking to other technologies, such as nickel-based and Lithium Ion Batteries.

58. Lithium Ion Batteries were first introduced into the market in 1991. By 2000, they had become the most popular type of rechargeable batteries. By 2009, sales of Lithium Ion Batteries dwarfed sales of NiCd and NiMH batteries.

59. Nokia's purchases of Lithium Ion Batteries and NiMH batteries during the Conspiracy Period tracked this general trend. In 2000 and 2001, Nokia purchased nearly the same amount of NiMH batteries as it did of Lithium Ion Batteries (measured by total dollars spent). By 2005, nearly all of Nokia's purchases of Batteries from Defendants were Lithium Ion Batteries.

## **2. Lithium Ion Battery Cell Technology**

60. A Lithium Ion Battery Cell generally contains four primary components: (1) the negative electrode (cathode); (2) the positive electrode (anode); (3) the electrolyte; and (4) the separator.

61. Rechargeable Lithium Ion Battery Cells work due to the spontaneous release of lithium ions from the positive electrode (anode) and acceptance of these ions in the negative electrode (cathode). The lithium ions migrate from the anode through the solvent/salt mixture (electrolyte) to the cathode. At the same time, electrons released due to the migration of lithium ions from the anode flow through the device that needs the power and are returned to the cathode. This electron flow is how a battery supplies power to a device. When the battery is being recharged, the flow and migration pathways are reversed; the lithium ions are driven from the cathode through the solvent/salt mixture back to the anode where they reside, and the required electrons are driven into the anode through the charging circuitry. The battery is now charged and is ready to be used again.

62. Lithium Ion Battery Cells possess certain characteristics that give them advantages over other types of rechargeable batteries. Lithium Ion Battery Cells are smaller, lighter, and have higher energy density and specific energy than other types of rechargeable batteries. Higher energy density

1 means that Lithium Ion Battery Cells hold higher amounts of energy per unit volume than other types of  
2 rechargeable batteries. Higher specific energy means that Lithium Ion Battery Cells hold higher amounts  
3 of energy per unit weight than other types of rechargeable batteries. A smaller and lighter Lithium Ion  
4 Battery can generate the same amount of electricity as, for example, a larger and heavier nickel-metal  
5 hydride battery. A state-of-the-art one-kilogram Lithium Ion Battery Cell can store the same amount of  
6 energy as a five-kilogram lead-acid battery.

7 63. These and other characteristics of Lithium Ion Battery Cells have made the Lithium Ion  
8 Battery the standard battery of choice in consumer electronic products. Throughout the Conspiracy  
9 Period, the majority of Lithium Ion Batteries were manufactured for cellular phone and notebook  
10 computer applications.

11 64. Mobile devices such as cellular phones have accounted for the dominant share of  
12 applications for Lithium Ion Batteries throughout the Conspiracy Period. In 2000, use in cellular phones  
13 accounted for over fifty-five percent of the Lithium Ion Battery market; in 2011, cellular phones still  
14 accounted for almost forty percent of the market. In 2008 alone—the year certain Defendants have  
15 already pled guilty to having price fixed Batteries—Nokia purchased well over six hundred million  
16 dollars' worth of price-fixed Batteries worldwide.

### 17 3. Packing Lithium Ion Battery Cells

18 65. To be functional, Lithium Ion Battery Cells must be placed into packs intended for  
19 insertion and use in the device. For Lithium Ion Batteries for use in mobile phones, there was typically  
20 only one Lithium Ion Cell per Battery. The process of placing this Cell into a package with the  
21 associated circuitry is referred to as packing. The assembly of battery cells into battery packs does not  
22 alter the essential character of the cells. Rather, packing allows the cell to operate as a battery to provide  
23 power. Typically, the cost of materials that go into a cell accounts for 80%–90% of the cost of a pack.

24 66. In general, the cathode, and components of the cathode, is the most expensive material  
25 component of the Battery, followed by the electrolyte, anode, and separator. A much smaller percentage  
26 of component cost is dedicated to packaging and the basic circuitry. The packaging controls charge and  
27 discharge levels, and interconnects multiple cells for powering various electronic and other devices.  
28

67. Nokia purchased Batteries directly from Defendants, containing Cells manufactured by those same Defendants. For most purchases, Defendants were required to pack their own Cells. In the limited instances when Defendants used a third party in the manufacturing process, Nokia required Defendants to get Nokia's express permission in advance, and Nokia purchased the Batteries directly from Defendants.

68. Nokia did not purchase Batteries from third party packers.

69. Upon information and belief, title to the Batteries ultimately purchased by Nokia never transferred from Defendants to any third party packers.

70. Defendants' own documents show that they understood that Nokia preferred to purchase Batteries packed by the same company that manufactured the Cell. According to Sanyo, "customers, like Dell, Nokia, and Motorola, recognize[] SANYO's Pack Technology, and prefer[] SANYO to manufacture and supply Pack." Panasonic (then-MBI) also understood that "Nokia decided that in principle, Cell and Pack must be supplied by the same supplier."

71. In sum, a Lithium Ion Battery's Cell accounts for over 80 percent of the cost of the Battery; assembling Cells into Batteries does not change the Cell; raw Cells have no practical use; and the Cells and Batteries are essentially economic equivalents, so that a price fix on the Cells is a price fix on the Batteries and a price fix on the Batteries is the same as a price fix of the Cells. As such, there is no meaningful practical or economic distinction between Cells and Batteries in terms of how Defendants price fixed the Batteries purchased by Nokia.

#### **4. Lithium Ion Batteries are Commodity Products**

72. Three formats—cylindrical, prismatic, and polymer—comprise the market at the heart of the conspiracy alleged in this case. The basic composition and manufacturing for each of these formats largely overlaps. For instance, on information and belief, Samsung SDI's report of meetings it held with Japanese manufacturers in October 2000 notes that polymer batteries have the "[s]ame structure as lithium ion that uses liquid electrolyte." Sony's Battery Technology Planning Team Leader has explained that the chemistry of polymer batteries and prismatic batteries is the same. As a result, the Lithium Ion Battery business is a single overall market, rather than separate markets for each type of battery format.

73. Lithium Ion Batteries generally are not interchangeable among other types of rechargeable batteries, such as nickel cadmium, nickel-metal hydride, and nickel-zinc.

74. Lithium Ion Batteries are highly standardized products and interchangeable among products of the same type across manufacturers. For instance, the BL-5C Battery—a commodity product which became a standard in the mobile phone industry—made up the largest volume of Nokia’s purchases from Defendants over a ten year span. These factors make Lithium Ion Batteries susceptible to commoditization—a process whereby a good that once possessed distinct attributes ends up being an indistinguishable commodity. Commodities are wholly or partially fungible, and, since they are viewed by the market as equivalent without regard to who produced them, customers tend to purchase them on the basis of price alone. Thus, BL5C Batteries were an exemplary commodity product. Once a good is wholly commoditized, producers can increase their market share only by cutting prices, thus leading to lower sales prices to customers. This is precisely the situation Defendants wanted to avoid and explains why they colluded to restrain supply and stabilize Lithium Ion Battery prices.

#### **G. VIOLATIONS ALLEGED**

75. As alleged in this Complaint, Defendants engaged in a conspiracy to fix, raise, stabilize, and maintain the price of Batteries throughout the Conspiracy Period. Defendants’ acts, practices, and course of conduct in furtherance of their conspiracy evolved over time and included, but were not limited to the following: coordinating prices for specific customers and products; engaging in continuous communications on confidential and proprietary business matters to eliminate price competition; allocating market shares; restricting supply of Batteries; using input costs as a pretext for industry-wide pricing formulas; and concocting mechanisms to nullify competitive sales processes to their customers. As a result, during the Conspiracy Period, Nokia purchased Batteries directly from Defendants at fixed, non-competitive prices.

76. What follows is a non-exhaustive summary of the acts, practices, and course of conduct the Defendants and their Co-Conspirators engaged in over the Conspiracy Period based on publicly available information about Defendants’ illicit activities.

1                   **1. The Korean Defendants' entry into the market undermined Japanese**  
2                   **dominance and threatened to cause prices to drop**

3                   77. In 1991, Sony released the first commercial Battery. Between 1991 and 1999, Sony and  
4 its fellow Japanese suppliers dominated the market for Batteries, with 95% of the world's secondary  
5 batteries coming from Japan by 2000. Prices for Batteries remained stable during this period.

6                   78. Around 1999, Korean manufacturers entered the Battery market, posing the first  
7 competitive threat to the Japanese suppliers. LG Chem became the first Korean manufacturer of  
8 Batteries in 1999, and Samsung SDI followed in 2000.

9                   79. To stem the decline in Battery prices caused by the competition between the Japanese and  
10 Korean producers, the Japanese Defendants conspired with the Korean Defendants to fix, raise, stabilize,  
11 and maintain prices. Defendants took various acts in furtherance of this conspiracy over the course of at  
12 least 110 illicit meetings and communications that began in 2000, evolved over time, and lasted until  
13 May 2011.

14                   80. Participating in many of these meetings and communications were top-level management  
15 for Defendants and Co-Conspirators, including:

- 16 • For LG Chem—Soon Yong Hong (Executive Vice President), Myung Hwan Kim (Director,  
17 Battery Division), and Joon Hoo Lee (Vice President, LG Notebook Division);
- 18 • For Samsung SDI—Jin Geon Lee (Executive Vice President and Sales Team Leader), Oong  
19 Kyun Kim (General Manager), Jong Seon Park (Senior Manager), and Hee Kyu Yeo (Group  
20 Leader and Senior Manager);
- 21 • For Panasonic—Toru Ishida (President) and Masatsugu Kondo (Director, Small Battery  
22 Division);
- 23 • For Sanyo—Toshimasa Iue (President and COO) and Mr. Ikegami (General Manager);
- 24 • For Sony—Mr. Gazi (CEO, Sony Energy Company) and Yutaka Nakagawa (Deputy President,  
25 Sony Micro Systems Network Company and President, Sony Energy Company);
- 26 • For Hitachi Maxell—Kakbon Kakumoto (Vice Director of Battery Sales Headquarter and  
27 Business Strategy General Manager) and Taekjeong Sawai (Proxy General Manager of Business  
28 Strategy Division);
- For GS Soft Energy (joint venture of GS Yuasa Corporation and Sanyo Electric Co. Ltd.)—Mr.  
Honma (President), its Vice President and its General Manager;



- For NEC—its Executive Vice President and its General Manager (Planning Division), Motohiro Mochizuki (NEC Tokin’s Head of Business Planning Department); and
- For Toshiba—Hirayama Kazunari (General Manager of Business) and Ozaki Hidemichi (General Manager of Planning).

**2. Defendants engaged in collusive communications regarding supply, customer information, and market movements**

81. Beginning no later than 2000, when it became apparent that the Korean manufacturers would continue to grow their share of the Battery market, the Japanese Defendants abandoned any initial hostility to the Korean manufacturers and, instead, began sharing with them confidential and competitively sensitive information regarding supply and demand, market trends, capacity, sales forecasts, and pricing for Batteries.

82. Defendants were able to and did use the confidential, proprietary, and forward-looking information obtained from other Battery suppliers to set prices to their own customers. This type of information would not normally be exchanged absent collusion, and the exchange of this information shows that Defendants were more interested in cooperating with each other than competing against each other.

83. At first, on information and belief, these collusive meetings took place during semi-annual visits by representatives of the Korean Defendants to the offices of the Japanese Defendants. During the Conspiracy Period, these semi-annual meetings usually occurred in late February/early March and again in late July/early August. These semi-annual meetings were frequently supplemented with other gatherings which tended to occur in “off” months such as October or November.

84. At the semi-annual meetings, Defendants explicitly sought mutual cooperation and shared commercially sensitive, non-public information pertaining to their respective battery businesses. Topics of discussion at these meetings included supply and demand outlook; sales performance and outlook; expansion plans and capacity; mobile device and notebook computer market information (the two largest markets for Batteries); the possibility of moving production to China; expanding to other product markets; updates on competitors; and the impact of raw material prices on the manufacturers’ cost structure. One recurring theme among the discussions was that Defendants should agree to never fully meet market demand, thereby ensuring a perennial supply shortage and generating higher prices.



85. In addition to their on-site visits, Defendants engaged in other meetings, typically at cafes, restaurants, and other out-of-the-way locations. While Defendants generally met with only one other Defendant at a time in order to better conceal their conspiratorial behavior, all Defendants participated in such meetings during the Conspiracy Period.

### **3. Defendants engaged in collusive meetings between 1999 and 2001**

86. On information and belief, Defendants' collusive conduct began as early as 1999. On August 16, 1999, Toshimasa Iue, who simultaneously served as Executive Vice President and CMO of Sanyo Electric Co., Ltd. and as President of Sanyo Soft Energy Company (joint venture of GS Yuasa Corporation and Sanyo Electric Co. Ltd.), and General Manager Honma, Head of Sales Operations for Sanyo Soft Energy Company, visited Samsung SDI and discussed "cooperation for the battery business."

87. Samsung SDI's Operation Planning Team (General Manager Ui Jin Yoo, Manager Young No Kwon, and Assistant Manager Seung Hee Yoon), M/E Business Team (Senior Manager Yoo Mi Kim and Manager Sung Sik Moon), Energy Lab (Manager Sang Won Lee), and Tokyo Office (Senior Manager Hee Seung Yoo and Manager Young Taek Cho) held bilateral meetings in Japan with Sony Energy Company (General Manager Konno and Manager Oiyama), GS-Melcotec (General Manager Eiji Yamada, Manager Kazunori Nagahata, and Keiji Matsuo), NEC (Ryuichi Matsumoto), Hitachi Maxell (General Manager Fukabori, Mr. Horike, Mr. Hanada, and Mr. Akagawa), and Matsushita (General Manager Aoyagi, Manager Mori, and Mr. Masuda) to discuss the polymer and prismatic battery business on October 15–19, 2000. The meeting participants exchanged at least secondary battery market forecasts on the polymer business, and the potential of the Chinese market.

88. These meetings reflect the parties' collusion with respect to Batteries. For example, Samsung SDI and Sony recognized that the polymer format would not replace the prismatic format and discussed that "[b]attery makers should rather create a new market than aggravating the competition amongst the makers."

89. Notes of the October 2000 meeting between Samsung SDI and Yuasa (one of two GS Yuasa predecessors) memorialize the companies' history of cooperation on batteries and intent to maintain that cooperation. On information and belief, those notes include:

(5) Two companies' cooperation relationship (Arahi GM)

- Purpose of cooperation – The two companies have had exchanges for 5 years since '95 in the nickel hydride battery field, but as the expiration of the contract is approaching, there is a sense of lacking feeling.

We believe strategic partnership will be important among companies for the battery business in the future.

SDI is an electronics company and Yuasa is strong in the industrial use field, so we believe there will be many parts where the two companies can cooperate in supplemental fashion.

Based on the thought that if the two companies can maintain cooperation rather than be in a competitive relationship, it could be Win-Win, we thought of maintaining continued cooperation relationship between the two companies. SDI's significant strength is having the substantial domestic market that is SEC [Samsung Electronics Company].

- Cooperation method – Rather than trying to accomplish something substantial from the beginning, it would be better to first enter into an NDA and then set various Themes and carry forward those that are feasible first through exchange meetings.

As there is ample room for development in Ion batteries and Polymer batteries in the future, it will be possible to avoid duplicate investment through the cooperation between the two companies.

- Yuasa's position towards SDI's Opinion: Basically was in agreement.

(Emphasis in original.) Samsung SDI and Yuasa agreed to meet bimonthly going forward.

90. In May 2001, LG Chem's Vice President Gui Pyo Hong and Senior Manager Seok Hwan Kwak met with Sony's Director Nishi and asked for cooperation on Batteries.

91. Samsung SDI held meetings in Japan with an Executive Vice President from GS Yuasa, a Sales Business Department General Manager from Sanyo Soft Energy Company, the President of Sony Energy Company, a Vice President of MBI (now Panasonic), a Director/General Manager of GS-Melcotec (a GS Yuasa affiliate), and a Vice President of Toshiba on May 5–10, 2001. Those meetings included discussions of the outlook for the Battery market, the status of each company, including its products, sales performance, and production and sales status. Samsung SDI's report in advance of these meetings notes a "Major History of Cooperation" between Samsung SDI and Yuasa including a proposal

1 for cooperation during a meeting on August 9, 2000, a meeting between both companies' business team  
 2 heads on August 28, 2000, and an agreement to pursue cooperation during a meeting of planning and  
 3 business team personnel on October 18, 2000. According to this report, "SDI will hold regular exchange  
 4 meetings with Yuasa."

5 92. On August 26, 2001, LG Chem's Executive Vice President Jong Pal Kim, General  
 6 Manager Woon Hun Hwang, and Senior Manager Seok Hwan Kwak met with Sony Energy Company's  
 7 Chief Executive Officer, Mr. Gazi, and Sony's Director Nishi. At the meeting, they discussed  
 8 cooperation on Batteries.

9 93. On September 16–19, 2001, Samsung SDI's Senior Vice President Hong, Senior Vice  
 10 President Jeong, Vice President Ahn, and Senior Manager Yoo held meetings in Japan with Sanyo Soft  
 11 Energy Company's Vice President Kan Akira and with MBI's (now Panasonic) Executive Vice  
 12 President for Battery Business Kawase Kirushi. Samsung SDI's report entitled "Japanese Companies  
 13 Meeting Reference Material" describes the company overview of those competitors, their product line-  
 14 up strategy, foreign market entry status, and production and sales of Batteries in 2000.

15 94. Samsung SDI held meetings in Japan with GS-Melcotec (a GS Yuasa affiliate), Toshiba,  
 16 Sony, and Matsushita on November 4–8, 2001. Participants for Samsung SDI at these meetings included  
 17 members of the Operation Planning Team (Senior Manager Hee Seung Yoo and Manager Young No  
 18 Kwon), the M/E Business Team (Manager Han Myung Kim and Manager Seung Won Lee), and the  
 19 Tokyo Office (General Manager Chan Shik Park and Manager Young Taek Jo). Participants from GS-  
 20 Melcotec included Managing Director Tanaka and Sales Division Director Okada. Participants from  
 21 Toshiba included Production Planning Division Group Leader Iwasaki and Head of Production Planning  
 22 Division Ozaki. Participants from Sony included Division Executive Manager Furuya, Group Executive  
 23 Manager Konno, Business Strategy Chief Nagamine, and Group Technical Chief Engineer Sekai. At the  
 24 meetings, the participants discussed company status, production/capacity status, market outlook,  
 25 polymer battery business strategy, China market entry strategy, and cylindrical business. Samsung SDI's  
 26 Japan Business Trip Report Results highlights that: (1) "Panasonic showed willingness to exchange  
 27 opinions"; (2) GS-Melcotec sought a "cooperative relationship" for polymer batteries; and (3) Samsung  
 28

SDI agreed to GS-Melcotec's request for an "exchange of information in polymer market and market development."

**4. Defendants continued their collusive meetings in 2002 and 2003**

95. On information and belief, Defendants continued their meetings in 2002 and 2003.

96. From March 12–16, 2002, representatives from Samsung SDI's business and marketing teams discussed—in separate meetings with Sony, Sanyo, Hitachi Maxell, GS-Melcotec (a GS Yuasa affiliate), and MBI (Panasonic)—current and forecasted supply and demand for cylindrical, polymer, and prismatic Batteries, production capacity, possible entry into China, the notebook computer battery market, and problems caused by excess product supply. As a result of these meetings, Samsung SDI, Sony, and Sanyo (and likely other Defendants) agreed to refrain from extending their existing capacity in order to keep supply tight.

97. In July 2002, LG Chem Executive Vice President Hong met with "Division Leaders" from Toshiba, MBI (Panasonic), Sony, and Sanyo to secure cooperation from these Defendants in the Battery market.

98. The Samsung SDI team returned to Japan during the period October 22–25, 2002, at which time they met with Sanyo, Toshiba, GS-Melcotec, GS Soft Energy (joint venture of GS Yuasa Corporation and Sanyo Electric Co. Ltd.), and MBI (Panasonic) to discuss substantially the same subjects that were raised in the March 2002 meeting. Responding to collective fears among Defendants that excess supply would give rise to a drop in price, the Vice President and General Manager of GS Soft Energy encouraged the companies to meet only 80% of market demand. In fact, there was explicit recognition that "With price competition only, all will be in trouble → have to make the industry Healthy." GS Soft Energy and Samsung SDI further discussed a "strategy to get rid of a company which disturbs the market."

99. For one meeting on October 22, 2002, between employees Hirayama Kazunari and Ozaki Hidmichi of Toshiba and Ki Hoon Ahn, Yo Han Oh, Han Myoung Kim, and Young Taek Cho of Samsung SDI, agenda items included "Cylindrical Type," and "Square Type." The companies communicated that for cylindrical, "The price of 2.2Ah to Motorola-ESG is almost the marginal cost

1 level,” and communicated regarding the “2003 price for mobile phone use” and that “it is expected that  
2 demand for discount will be approximately under 10%.” The conspirators further “[a]greed to hold the  
3 regular interchange staffer-centric conference (around end of November) → once every six months.”

4 100. During these meetings, Defendants agreed not to compete with each other for sales to  
5 vertically-integrated affiliates. For instance, on October 24, 2002, Sanyo informed Samsung SDI that it  
6 would refrain from supplying Batteries to Samsung SDI’s affiliate Samsung Electronics.

7 101. On November 21, 2002, management representatives from Sony and LG Chem met at  
8 Sony’s offices in Japan for the purpose of “maintaining future cooperating relations.” Personnel from  
9 Sony Corporation’s Core Technology & Network Company included Senior General Manager Yasuhiro  
10 Hosozawa, General Managers Toshiaki Naito and Masaru Hiratsuka, Manager Isao Watanabe, Director  
11 Kiyoshi Katayama, and Senior Manager Ryoichi Yamane. LG Chem was represented by Seok Hwan  
12 Kwak, LG Chem’s Cell Business Division leader. At this meeting, Sony proposed that the two  
13 companies allocate the business according to battery size, because “if the two companies engage in price  
14 competition on the size, it would cause a loss to both. . . .” LG Chem promised that if Sony led an  
15 increase in polymer battery prices that was reasonable, LG Chem would follow Sony’s lead.

16 102. The pattern of semi-annual collusive meetings between Korean and Japanese producers  
17 of Batteries continued in June/July and October 2003. For instance, Samsung SDI representatives met  
18 with President Honma of GS Soft Energy on June 26, 2003, at which time they discussed second quarter  
19 sales forecasts for cylindrical, prismatic, and polymer Batteries. On July 16, 2003, Samsung SDI and  
20 Toshiba met at the Tokyo ANA Hotel to discuss capacity and operating rate information. On October 2,  
21 2003, Samsung SDI representatives met with GS Soft Energy’s General Manager of Marketing at  
22 Tokyo’s Shinjuku Restaurant. Discussion topics included the 2004 demand forecast for prismatic and  
23 polymer Batteries, price forecasts, raw material supplies, and each Defendant’s sales trends. The  
24 conspirators specifically communicated about Nokia, noting that “[t]here is a grand-scale extension of  
25 Sanyo, but it is getting concentrated / emphasized on Nokia.”

5. **As the conspiracy evolved, Defendants fixed prices for specific products, agreed not to compete on price, and restricted Battery supply**

103. The year 2004 represented a significant escalation in the intensity of the collusive conduct, with Defendants increasing their cooperation to set prices, avoid price reductions, and tighten supply.

104. Of critical import were the meetings held between LG Chem and Sony on March 2–3, 2004. According to an LG Chem document entitled “President Minutes on Business Trip to Japan,” the purposes of the meeting were introducing “LG Chem’s new management/President of Energy Company at Sony, and the new division leader to each other, sharing information, and asking for cooperation among companies.” Participating in this meeting were Yutaka Nakagawa, President of Sony Energy Company, LG Chem Executive Vice President Hong, and Myung Hwan Kim, Director of LG Chem’s Battery Division.

105. The same “President Minutes” document describes, in meticulous detail, both an agreement between LG Chem and Sony to fix the price of Batteries and the agreement of the other Defendants to do so as well:

Sony plans to raise customer prices as said in Press release on Feb. 24. . . . Sanyo also announced price hikes to customers and MBI also plans to do so. Afterwards, we received the opinions of NEC/Hitachi Maxell that they would raise prices as well. . . . We believe that if LG Chem and [Samsung SDI] cooperated in these moves, the growth of the Li-Ion battery industry is likely to go in the right direction.

Later in the President Minutes, under the heading “LG Chem’s Response,” LG Chem documented that “[w]e [LG] shared the opinion of Sony and mentioned that we would cooperate on [the price increase].” LG Chem also made reference to a “prior meeting with our competitor SONY,” conducted by LG Chem Executive Vice President Hong, “with the aim of achieving cooperation among companies in order for the growth of the healthy Li-Ion industry.”

106. On June 30, 2004, Samsung SDI representatives met with key Sony executives at the headquarters of Sony Energy Company. The Samsung SDI and Sony representatives discussed price fluctuation in the notebook PC market and expressed fear that the price of Batteries could fall due to excessive inventory. Sony executives committed to avoiding any price cuts.

107. This June 30, 2004 meeting also provided a glimpse into how Defendants viewed each other, *i.e.*, as collaborators rather than competitors. The President of Sony, in his opening remarks to the Samsung SDI contingent, stated that Sony was “[v]ery close friends with Samsung . . . [and] [h]as visited Samsung several times to discuss cooperation in memory stick.” Further, he was “[g]lad that [Samsung SDI] and Sony have been competitors, but also [have] been able to cooperate with each other at the same times as entities participating in the same business,” and he “[w]ish[ed] such a relationship would continue.” At the meeting, the companies also shared market information such as demand forecast for cellular phones, notebook PCs, PDAs, and digital cameras and agreed to have another meeting.

108. On July 28, 2004, Samsung SDI met with the following executives from Matsushita Battery from 3:00 p.m. to 5:00 p.m. at Osaka Matsushita Battery: “Global Management Group GM Akihiro Shimizu,” and “Global Marketing Overall Management Department GM Masaya Niko.” The conspirators shared their companies’ production forecasts for 2004, 2005, and 2006 and reinforced that “There is no plan for cylindrical expansion in 2004.”

109. On July 30, 2004, Samsung SDI met with Hiroshi Noguchi of Sanyo at Tokyo Sanyo Battery in the early afternoon. The conspirators communicated regarding Sanyo’s 2003 “sales profit rate 10% range” and a “2004 sales amount 210 billion yen, sales profit 17% target.” The conspirators further communicated regarding demand forecasts including a “Cell demand forecast” regarding “[r]ectangular / polymer demand for mobile phone use” and “cylindrical / rectangular” demand. The conspirators further discussed, regarding the “Toshiba takeover and SGS related,” that “[a]s of June 2004, there is no change in the plan to expand rectangular 5M/month from 47M/month (cylindrical 16M, rectangular 30M, polymer 1M) Capa until the end of the year.”

110. On August 9, 2004, Sony and LG Chem met at Sony’s office, where LG Chem “proposed price cooperation to defense prices and to protect the industry, so mentioned that [LG] is also willing to cooperate through active participation.”

111. In November 16, 2004, Samsung SDI and Sanyo further discussed “[c]ylindrical high capacity (above 2.4AG)” and that “For Mobile Phone: ’05 – ’06 demand +8~10%, selling price [delta] 15%” and “For Note PC: ’05-’06 2.4Ah or more capacity products show demand +20%, selling price as



1 [delta] 10%, forecast for the sole expansion in the market.” Regarding “Cylindrical Business,” the  
 2 conspirators communicated that “HP’s low price model 2.0Ag demand is large, but price at below U\$2.0  
 3 is a problem.”

4 112. Samsung SDI, Sanyo, Sony, MBI (Panasonic), GS Soft Energy, NEC, and Hitachi Maxell  
 5 held another round of meetings on February 21–25, 2005 in Tokyo. Worried about being caught  
 6 between rising raw material costs and softening battery prices, Defendants agreed that they should  
 7 refrain from adding new production lines to reduce supply and thus stabilize prices. For example, Sanyo,  
 8 which planned to have four new lines for its cylindrical batteries in operation by the end of 2005,  
 9 decided instead to add only one. Defendants conveyed a similar message at that year’s second round of  
 10 meetings, held on July 19–22, 2005. During a July 22, 2005 meeting with Samsung SDI, for example,  
 11 Hitachi Maxell described a 50% oversupply of prismatic batteries and stated that there was a “[g]ap  
 12 between the facility CAPA [capacity] and demand, so when considering the actual production CAPA,  
 13 the rate of oversupply can decrease a bit.”

14 113. Representatives from LG Chem also met with Samsung SDI over lunch in February 2005  
 15 to discuss their sales forecasts for various types of Batteries. They agreed to cooperate in setting the sale  
 16 price of their Batteries as much as possible. At a meeting the following month at a coffee shop in Seoul,  
 17 Defendants again discussed sales volume, capacity, and utilization rates.

18 114. Jae Min Park, then-Senior Manager for LG Chem, Ltd., and Y.A. Oh, then-General  
 19 Manager for Samsung SDI Co., Ltd., met for lunch on July 26, 2005 and discussed sales figures by  
 20 customer for particular batteries. During this meeting Samsung SDI agreed to set prices for cylindrical  
 21 batteries at ranges that LG Chem proposed. Notes of this meeting demonstrate Defendants’ continuing  
 22 collusion throughout this period, with General Manager Y.A. Oh stating that the companies “[p]roposed  
 23 to minimize damages caused by unnecessary competition in dealing with customers by communicating  
 24 with each other in the future.”

25 115. Defendants continued in their agreement not to compete for business with other battery  
 26 manufacturer’s electronics affiliates. On September 26, 2005, Sanyo informed LG Chem that it “has no  
 27 plan to target major business divisions of LG Chem or Samsung SDI, which has its own battery maker  
 28



company in its Group.” Sanyo also acknowledged that it would not target sales to the electronics divisions of Panasonic or Sony because they “have their own battery business sections.”

116. On October 26, 2005, representatives of Panasonic and Samsung SDI agreed to avoid lowering the prices of certain Batteries, as described in the notes of the meeting:

2.0Ah Ni—Mn [type of cylindrical Lithium Ion Battery] is seen to be Low-cost, but there is no reason to lower the price at the similar level as current Li-Co.

Actually, cost is becoming a little less expensive, but Ni—Mn 2.0Ah’s performance is better than Co. Thus no reason to lower the price.

117. Defendants’ top management continued to play an active role in facilitating the conspiracy. For example, a Business Trip Report reveals that LG Chem executives met with high-level counterparts from Sanyo and Panasonic on September 26, 2005:

[t]he objectives of these meetings were to create direct contact points between the top management of LG Chem and Japan’s major battery companies. Sanyo and [Panasonic]/share information/create a partnership opportunity for the sound expansion of the market, as well as to establish cooperative relationship between the Battery Association of Japan . . . and the Battery R&D Association of Korea[.] . . . [Finally] [t]he companies (especially Sanyo) showed their strong willingness to cooperate with LG Chem in areas where cooperation is possible. The meetings have created direct contact channels between top managements of the companies.

118. The foregoing meeting topics also included pricing. When Sanyo stated that it would not agree to a customer’s request for a 20% price reduction, LG Chem responded as follows: “If Sanyo does not lower prices, LG Chem will not down its prices either.”

119. The year concluded with meetings between Samsung SDI, Sony, and Sanyo on November 14–16, 2005 in Tokyo. Samsung SDI’s notes of this meeting again convey the collusive nature of Defendants’ business relationship: “[t]rust is solidified through continuous information exchange meetings with Sanyo.” Thus it is clear that the information exchange by Defendants throughout the Conspiracy Period was continuous and systematic.

120. At meetings between LG Chem and Sony on February 20 and 26, 2006 at Sony’s Tokyo offices, a Sony executive, eager to institutionalize the exchange of information between the companies,

1 stated that Sony “hoped that both [Sony and LG] discuss cooperation ways [sic] like information  
2 exchanges through regular meetings in the future.” The parties discussed holding a Division Leader-  
3 level meeting between the companies before moving on to a President-level meeting.

4 121. On March 20, 2006, Samsung SDI executives met with NEC executives from 1:00pm to  
5 2:40pm in Chiyoda, Tokyo. The parties communicated on a number of collusive subjects, which  
6 notably included NEC’s projected demand from Nokia (as well as customers Motorola and Siemens-  
7 both mobile device manufacturers). The parties went on to exchange detailed projected production  
8 figures, broken down by capacity per month, as well as NEC’s plans to enter the Polymer Battery  
9 market.

10 122. At a lunch meeting with a representative from LG Chem in May 2006, a Samsung SDI  
11 representative discussed supply, demand, and pricing information for a number of Samsung SDI’s  
12 customers. Similar meetings, consistent with the semi-annual meetings institutionalized among  
13 Defendants, took place between Samsung SDI and GS Yuasa on August 8, 2006 and March 15, 2007,  
14 and between Samsung SDI and MBI (Panasonic) on August 9, 2006.

15 **6. A rise in the price of raw materials in early 2007 gave Defendants further**  
16 **cover to initiate another coordinated price increase**

17 123. On information and belief, in February 2007, the price of cobalt, a key raw material in  
18 making Batteries, rose sharply. Defendants, concerned about being caught between rising manufacturing  
19 costs and falling battery prices, decided to act. Upon information and belief, using the rise in raw  
20 material cost as a pretext, Defendants, through a series of clandestine meetings, phone calls, and coded  
21 emails, orchestrated a uniform price increase for Cells and Batteries.

22 124. On February 24, 2007, high-level executives from Samsung SDI and Panasonic met in a  
23 private room in a restaurant in Seoul, South Korea. The attendees included HK Yeo of Samsung SDI,  
24 who was in charge of Samsung SDI’s office in Japan. The attendees discussed the rise in the price of  
25 cobalt and agreed on a formula for collectively raising their prices for Batteries. The pricing formula  
26 was then conveyed to the other Defendants. Samsung SDI spoke to LG Chem over the phone about the  
27 proposed price increase, while Panasonic conveyed it to the other Japanese Defendants. Samsung SDI  
28 and Panasonic further negotiated the price increase via phone calls and email.

125. Just a few days later, on February 27, 2007, high-level executives from LG Chem and Sanyo, including LG Chem Vice President Lee and Sanyo General Manager Mr. Ikegami, met at Akasaka Restaurant to discuss the timing of the price increase and arranged for a continuous channel of communication with each other.

126. To ensure that their price-fixing plan would not be revealed, Defendants used secret codes in their emails: in arranging calls, they would state that the purpose of the call was to discuss “safety” when in reality it was to fix prices. They also insisted that those with access to this information keep it confidential.

127. In an email dated March 19, 2007, a Samsung SDI Group Leader and Senior Manager wrote to his counterparts at Panasonic, “[w]e want to talk about your safety technology on HRL and PSS [types of batteries]. So please call Mr. Yeo. His Cell phone number is XX-XX-XXXX-XXXX.” Mr. Yeo’s position at Samsung SDI, however, had nothing to do with safety—it was to set battery prices as demonstrated by the email referenced below.

128. The next day, Samsung SDI executive H.K. Yeo sent an internal email, dated March 20, which laid out the contours of the price-fixing plan he had worked out with Panasonic:

1. Request for price increase starting this week

2. Increase (Proposal) Increase: Start 10~13% and hope to end with 8~10% . (Bottom).

[. . .]

3. Hope to apply to all models

[. . .]

4. Time to apply the increase: starting 4/1

5. Other company trend

- Sanyo: hopes for 8~10%

- Sony: about 10% (will end with less than 10% since starting with 10%)[.]

1           129. Joon Hoo Lee, LG Chem's Notebook Battery Vice President, wrote in a coded April 4,  
2 2007 email that he had discussed the proposed price increase with a representative of 'S' company,  
3 understood to be Samsung SDI. In an email that same day, Lee told Jae Gil Kim of LG Chem to "please  
4 make sure that you maintain internal and external security regarding the email, so that people other than  
5 the recipients on the list cannot access the email."

6           130. Later that month, at an April 26, 2007 meeting between LG Chem and Sanyo, the  
7 companies "both had the same idea that device makers should share the burden of the sudden price rise  
8 of raw materials and that price adjustment would be possible for cylindrical batteries," as stated in an  
9 LG Chem email summary. The LG Chem email further noted that "[i]t was further decided that both  
10 would keep exchanging ideas and [that Sanyo] would make Mobile Energy Division leader Mr. Itoh  
11 contact LGC Battery Division leader for mutual cooperation."

12           131. Defendants then exchanged numerous calls and emails throughout the spring and summer  
13 of 2007 as they coordinated the implementation of their price-setting plan. For instance, in an internal  
14 email dated June 20, 2007, Samsung SDI's Hee Joung Moon, summarizing a call he had with Sony,  
15 stated: "[o]pinion that Sony is planning 6MT [type of Battery] Ramp up in August . . . and 3Q pricing  
16 has been agreed upon at about JPY [Japanese yen] 320 range. 4Q pricing has not been discussed, and for  
17 Sony, as long as the cobalt price is maintained at the current price level, plan is in progress to [s]tay 3Q  
18 pricing in 4Q also."

19           132. A set of notes summarizing Samsung SDI's semi-annual meetings with the Japanese  
20 Defendants and their Co-Conspirators in July 2007, including NEC, Sony, Sanyo, GS Yuasa, and  
21 Panasonic, reveals that Defendants succeeded in increasing Battery prices: "An upward trend in market  
22 sales price continues due to cobalt price increase and the common view on shortage in supply of  
23 cylindrical type."

24           133. In June 2007, representatives from Defendants Samsung SDI, Sanyo, and Panasonic met  
25 together at a restaurant in the Shinagawa district of Tokyo. The participants discussed the successful  
26 early 2007 price increase and plotted to raise prices again later that year. Defendants also sought to  
27 establish a bottom-line selling price. Once the three Defendants agreed on the terms of this latest price  
28 increase, SDI agreed to transmit the details to LG, while Sanyo and Panasonic agreed to share the details

1 with the other Japanese manufacturers. Defendants agreed to discuss implementation of the price  
2 increase via telephone calls.

3 134. Defendants used this cobalt price increase as a pretext in price negotiations with Nokia.  
4 For example, a September 2007 email from Panasonic to Nokia proposing prices stated bluntly: “To be  
5 honest with you,[] we have no space to bear the cobalt price up any more, we would really ask you to  
6 accept above pricing for 4Q.” Other Defendants also demanded price increases citing the market  
7 impact of the rise in the price of cobalt.

8 135. Defendants continued to meet throughout 2007 to exchange production capacity, sales  
9 volume, and customer information and continued to make other anticompetitive agreements. Summary  
10 notes from a round of meetings with Sony, Sanyo, GS Yuasa, and Panasonic in March 2007 taken by a  
11 Samsung SDI representative state, under a bullet point entitled “Aggressive Pricing Policy Required to  
12 Increase Profitability,” that:

13 Every company showed a keen sensitivity to increasing profitability[.] Especially  
14 Sanyo and Matsushita [Panasonic] have strong interest in achieving profitability  
in lithium ion business due to deteriorating profitability in nickel-hydrate battery.

15 Considering supply and demand status based on industry’s conservative plant  
16 expansion, aggressive proposal and adjustment on market price while placing  
emphasis on achieving profitability are required.

17 136. In Defendants’ and their Co-Conspirators’ discussions, they discussed Nokia specifically.  
18 On September 13, 2007, Duck Yun Kim of SDI Korea met with individuals from Sanyo Japan at a  
19 restaurant in Seoul, Korea, where they discussed “batteries – discussion on Sanyo’s slow battery  
20 business, ‘did not respond to the price reduction request although M/S for Nokia is up to 90’; ‘upon  
21 request to a price reduction when the M/S dropped to 70% in 2004, [we] actually increased a price by a  
22 small amount with the reason of cobalt cost increase.’”

23 137. In order to ensure that the agreed price increase was effectuated, Defendants discussed  
24 with each other their upcoming negotiations with specific customers. For example, on October 1, 2007,  
25 Hee Jung Moon of Samsung SDI held a call with Mr. Negi of Sony regarding 2008 Battery price  
26 negotiations with a common customer—Sony Ericsson Mobile Communications (“SEMC”). During the  
27 call, Moon and Negi, ostensible competitors, strategized about how they would “sell” the proposed price  
28

1 increases to SEMC. Then, having agreed on their SEMC strategy, they had a follow-up call on October  
2 5, 2007 to formulate a plan for selling the price increase to Bosch, another common customer.

3 138. On October 5, 2007, LG Chem and Samsung SDI explicitly agreed on the price increase.  
4 A letter confirming this increase read: "Dear Vice President Lee [LG], The price agreed with [Samsung  
5 SDI] is as follows. . . ."

6 139. As the price of cobalt increased, Defendants' conduct towards Nokia demonstrates their  
7 collusion. As a result of the increase in the price of cobalt, Nokia renegotiated with Sanyo and agreed  
8 on a specific new price of Batteries. Three days later, Samsung SDI called Nokia and requested the  
9 exact price Sanyo and Nokia had negotiated.

10 **7. Defendants continued to maintain artificial prices in 2008 by using the rise of**  
11 **raw material prices as a pretext**

12 140. Throughout 2008, on information and belief, Defendants continued to meet frequently  
13 and discuss production capacity, supply and demand, customer and competitor movements, and market  
14 trends. During this period, they also agreed to implement specific battery price increases.

15 141. For example, on January 28, 2008, representatives from LG Chem and Sanyo met at  
16 Narita airport in Japan where they discussed another round of battery price increases and the formula  
17 they would use to effectuate those increases. LG Chem was represented by Joon Ho Lee (Vice President  
18 in charge of Notebook business), Jae Min Park (Notebook CRM team leader), and Deuk Yong Kwon  
19 (Notebook CRM team). General Manager Ikegami participated on behalf of Sanyo.

20 142. At the same time, in early 2008, the price of cobalt began to climb again. LG Chem's  
21 contemporaneous discussions with Samsung SDI demonstrate in detail Defendants' plan to tie the price  
22 increase to the rise in the price of cobalt. This plan became clear from an internal LG Chem email dated  
23 February 11, 2008:

- 24 - Effective date: March 1 (March/April/May)
- 25 - Price increase: by 10% minimum
- 26 - [Samsung SDI's] Rationale: It is inevitable to increase the price at least by
- 27 10%, because although in the past increase the Cobalt price was \$30, Cobalt
- 28 price of \$40 is applied to months of March/April/May (three months).

1 Considering current Cobalt price increases, [Samsung SDI] plans to mention  
2 in advance that additional price increase is unavoidable for June/July/August  
(three months). (\$40 -> \$50)

3 (Therefore, it plans to raise price twice, first by 10% at minimum for  
4 March/April/May, and second by 10% at minimum for June/July/August).

- 5 - [Samsung SDI's] future schedule: [Samsung SDI] will visit its Taiwan  
6 customers from February 13 to February 15 to explain the plan above and ask  
7 for their understanding.
- 8 - LG []'s future schedule: After LG [] also gives a notice to [Samsung SDI], it  
9 will notify its customers of the price increase, and start to raise price from  
10 March 1. However, LG [] needs to raise the price by about 12%.

11 LG [] will say that it is inevitable to additionally raise the price 2% more  
12 compared to other competitors, due to higher production costs compared to  
13 [Samsung SDI's] capacity.

14 143. Communications in late February 2008 confirmed Defendants' intention to raise prices.  
15 For example, in an internal LG Chem email thread dated February 27, 2008, LG Chem noted that  
16 Samsung SDI "reconfirmed" the planned price increase, and "said that [Samsung SDI] does not have  
17 any problem with raising the price according to the contents mentioned last time." In a February 29,  
18 2008 meeting between LG Chem and Panasonic, the parties discussed a plan to increase prices, with LG  
19 Chem planning to follow up with Panasonic General Manager Matsumoto "regarding the price increase  
20 level."

21 144. Defendants' collusive communications in early 2008 bore fruit later that year. On May  
22 16, 2008, LG Chem learned from Samsung SDI that Samsung SDI agreed to increase prices for Batteries  
23 effective June 2008. Samsung SDI also agreed that it would lead the increase. LG Chem directed its  
24 employees to share the information with its overseas branch offices. An internal email among LG Chem  
25 employees dated May 16, 2008 referenced information "acquired from the Korean S Company  
26 [Samsung SDI]" and stated that Samsung SDI is "[p]lanning to increase prices in June (approximately  
27 by US\$0.16/Cell)."

28 145. By the summer of 2008, the major suppliers had signed on to the plan and had increased  
their prices. An LG Chem email dated June 10, 2008 confirmed that Sony would increase Battery prices  
as of June 15, 2008, and that Samsung SDI, Panasonic, and Sanyo would implement corresponding price



increases by July 1, 2008. Meeting minutes from a June 2008 LG Chem meeting involving LG Chem's offices in the United States contained a chart that included further detail on these price increases.

**8. The conspiracy continued through 2008, even after the price of raw materials began to fall**

146. As the summer of 2008 wore on, the price of cobalt began to drop. Defendants, who had sold the price increase to their customers on the basis of the rising price of cobalt, were faced with the task of getting their customers to acquiesce to higher Battery prices when the price of cobalt was falling.

147. On August 8, 2008, representatives of LG Chem and Panasonic conducted two meetings, one at a hotel and another at a restaurant over dinner. Minutes from the dinner meeting show that falling cobalt prices were foremost in the minds of the representatives who talked about how they would "sell" this round of price increases to customers when the price of cobalt was no longer rising:

Since Cobalt price is falling and battery demand/supply normalization is expected soon, customers' growing pressure on price decrease is anticipated. In the case of [Panasonic], since it engages in negotiation with customers with its price-related mechanism, 4Q price drop derived from falling Cobalt price is inevitable, and it is hard to break the rule just to maintain trust with customers. However, even if the price falls, plans to minimize the drop by developing internal logic.

148. Later that year, at a meeting on October 10, 2008 at the Narita Airport in Japan, representatives of LG Chem and Sanyo discussed production capacity as well as pricing. While Sanyo's fourth-quarter adjustment was based on the previously agreed cobalt formula, Defendants realized that this adjustment needed to be re-worked: "Cobalt's standard price fell by \$4 from \$49 to \$45, so price adjustment range is not that great."

149. Throughout these discussions, Defendants took steps to make sure that falling cobalt prices did not erode the inflated price of Batteries achieved by their collusive activities. In an email describing the meeting between LG Chem and Sanyo on October 10, 2008, LG Chem reported that the companies "[e]xchanged opinions on preventing activities to destroy prices within the market, and for that matter, [were] willing to maintain and expand appropriate company-to-company communication about related market information."



150. An October 12, 2008 internal LG Chem email reveals that Defendant's representatives responsible for Nokia were involved in the conspiracy. That email recounts a meeting including representatives of LG, as well as three persons from Panasonic, including "Takagi", responsible for Prismatic Battery sales to Nokia. In that meeting, Panasonic and LG made agreements to limit technology development, agreeing that the "industry needs to minimize development resources."

151. Defendants understood that, to continue selling Batteries at inflated prices, they would have to abandon their original pricing formula which tied the battery price increase to increases in the cost of cobalt. At a meeting in Osaka, Japan on December 8, 2008, between LG Chem Vice President Lee and Panasonic General Manager Matsumoto, among others, the two companies discussed creating a new pricing formula:

Both companies agreed that they should defend the current selling price because it is hard to secure volume through price cutting. Since Panasonic made the cobalt price of \$18/lb as the reference value when it first raised the price, it will adjust the selling price by using the current formula until the price of cobalt becomes \$18/lb. It said that when the price of Cobalt is under \$18/lb, it would consult customers with a new formula, adding that they are now studying a new formula.

152. Defendants continued their collusion and, as a result, prices remained artificially inflated until the last quarter of 2008.

**9. Notwithstanding the worldwide economic downturn in late 2008, Defendants continued to manipulate Battery prices**

153. On information and belief, in the face of the economic downturn in late 2008, Defendants continued their collusive efforts to maintain Battery prices at an artificially high level, including continuing to meet and exchange competitively sensitive information with each other.

154. For example, on October 13, 2008, LG Chem's John Ho Lee sent an email to LG Chem Executive Vice President Jungoh Kim that reported on a meeting in Osaka, Japan the previous week between LG Chem and the head of sales for Sanyo: "We exchanged opinions on preventing activities to destroy price mechanism within the market, and for that matter, both are willing to maintain and expand company-to-company communication about related market information."

1           155. Similarly, on December 5, 2008, NEC and LG met at NEC's offices in Tokyo to share  
2 information regarding capacity and market trends.

3           156. In 2009, in connection with a Battery bid being submitted to HP during a procurement  
4 event known as an e-auction, LG Chem and Samsung SDI coordinated their bids with each other to  
5 manipulate the outcome of the e-auction. Rather than submitting the required "blind bid," LG Chem first  
6 consulted with Samsung SDI and submitted a complementary bid that would permit both LG Chem and  
7 Samsung SDI to get a share of the business being awarded by HP without having to submit a  
8 competitively low bid.

9           157. A January 6, 2009 internal LG Chem email with the subject line "Content checked by P  
10 Company," from Deuk Yong Kwon to Joon Ho Lee recounted discussions between LG Chem and  
11 Panasonic about future pricing to customers for lithium ion rechargeable batteries and strategies to  
12 "defend the selling price" in the face of declines of production costs.

13           158. A February 12, 2009 internal LG Chem email with the subject line "Report on Japanese  
14 makers' trends," from Jang Won Huh (Assistant Manager, Global Battery Marketing Team) to Joon Ho  
15 Lee, attaches a report on information from Japanese companies. Mr. Hun wrote "I am reporting the  
16 recently acquired information on 3 Japanese competitors (Sanyo, Sony, Panasonic). . . ." Major customer  
17 demand forecasts are exchanged and compared, as are production development plans for future  
18 technologies, such as car batteries.

19           159. An April 7, 2009 internal LG Chem email with the subject line "Market Info 090407," to  
20 Min Ho Chung, Jae Kil Kim and Hee Kwan Ra from Joon Ho Lee (VP, in charge of Battery, Notebook  
21 Business) shared "information obtained regarding the grand mansion S across the sea. . . ." The email to  
22 S Company's line expansion plan, pricing plan, and its plan for merger with P Company. The email ends  
23 by stating "please delete as soon as possible." On information and belief, "S Company" refers to Sanyo  
24 and "P Company" refers to Panasonic.

25           160. A May 14, 2009 internal LG Chem email with the subject line "Report on D Company's  
26 April performance (compared with LGC)" from Young Moon Riew attaches an excel file entitled "LGC  
27 v. SDI Comparison of 2009 Sales," which includes Samsung SDI's sales performance by product and  
28 customer from January to April 2009.

1           161. An October 16, 2009 internal LG Chem email from General Manager Min Ho Chung  
 2 exchanges information acquired from Panasonic and Sanyo during meetings, which took place July 8 to  
 3 10, 2009, as well as information regarding “yesterday’s phone conversation content regarding  
 4 Panasonic’s cylindrical cell extension.” Chung reported “Japanese companies still internally question  
 5 about going for 6.5-7M/Month scale, unlike Korean companies.” A chart was attached to the email  
 6 comparing cell makers and customers’ cell demands. Also attached were the meeting minutes between  
 7 LG Chem and Panasonic, which reflected discussions of production forecasts, customer demand, pricing  
 8 goals, potential extensions, and various products. The email also attached Sanyo meeting minutes which  
 9 included a discussion of Panasonic’s acquisition of Sanyo stating “[t]he U.S. government is opposed to  
 10 the Pana’s pushing for acquisition due to the monopoly and oligopoly issue of the NiMH business.” The  
 11 conspirators compared LG Chem and Sanyo’s demand forecasts and plans for product development. The  
 12 minutes also include a section for “The talk result between LGC’s purchasing director and the division  
 13 leaders of Asahi kasei and Hitachi kasei (July 9, Manager Choi in Tokyo).”

14           162. Defendants’ collusive conduct continued into 2010 when Apple attempted to purchase a  
 15 specific type of Battery for use in its popular iPad. Initially, LG Chem and Samsung SDI both  
 16 contemplated selling Batteries to Apple in the low \$0.40 range. Rather than compete with each other,  
 17 Young Sun Kim of LG Chem, Ltd. directed Dong Woo (Donny) Lee of LG Chem America, Inc. to  
 18 speak to his counterpart at Samsung SDI (who was also in the United States at the time). As a result of  
 19 these communications, the two companies agreed to hold firm at \$0.50. Samsung SDI also shared its  
 20 “4Q roadmap” with LG Chem.

21           163. A September 14, 2010 internal LG Chem email thread with the subject line “Apple line  
 22 allocation for Apple – K93 price response” from Yongsun Kim includes detailed information on Apple  
 23 negotiations, LG Chem, and Samsung SDI. On information and belief, “K93” refers to Apple’s tablet,  
 24 the iPad. The email thread also refers to several meetings between the competitors. The email thread  
 25 demonstrates an arrangement between Samsung SDI and LG Chem regarding allocating sales to Apple.  
 26 One email to LG Chem Vice President Yong Wook Chung from Young Sun Kim, General Manager,  
 27 states that after “checking [with] SDI today . . . it would be better just to observe the progress” regarding  
 28

1 an Apple deal. Another message from Kim explains, “[b]ased on LGC’s logic, prices should be  
2 matched. . . . [W]e need to consider action plans after checking competitors’ information once again.”

3 164. On November 15, 2010, Dong Woo Lee of LG Chem wrote: “Talked to Senior Manager  
4 Park Jong Seon of SDI sales (used to be in charge of Apple) who has been seconded to Cupertino Office  
5 since last week, over the phone today, but couldn’t talk long as he is now on a business trip. It is likely  
6 that we can meet and talk properly once he comes back to Cupertino.” Lee then added what was  
7 discussed over the phone: “1) [h]ave been asked recently to increase volume, like us, regarding K93; 2)  
8 [h]ave been requested for supply of 2M/M or more ([s]eems to be more than that); 3) and it is also  
9 difficult for SDI to deliver all the requested volume; [w]as told that it had been thought that it would be  
10 impossible to supply all since Apple does over forecast every time, regarding too much total volume.”  
11 Next day, Lee updated his previous mail by stating, “Was told that the business trip site is currently  
12 Atlanta, fyi.”

13 165. In February 2011, Samsung SDI and LG Chem worked together to manipulate another  
14 HP e-auction. Because “only rankings are displayed, and it’s impossible to check competitors’ prices”  
15 during an auction, these Defendants worked together to develop a sophisticated bid-rigging plan to  
16 “nullify” the e-auction and, thus, return to their practice of submitting bids that had been fully  
17 coordinated in advance. An internal LG Chem email dated February 8, 2011 states that Samsung SDI  
18 “consented to the nullification of e-auction, and said that the Bottom [price] discussed between the two  
19 companies is \$16.” Internal LG Chem emails from March 2011, at least one of which contains coded  
20 references to competitors, indicate that competitive information regarding pricing was still being  
21 collusively exchanged.

22 166. Defendants’ conspiracy to fix, raise, stabilize, and maintain Battery prices continued  
23 undeterred throughout the Conspiracy Period. The initial “cooperation” and collusive exchanges of  
24 competitively sensitive information that enabled Defendants to fix prices evolved into specific price  
25 agreements, bid rigging, supply restrictions, and other conduct to manipulate prices of Batteries during  
26 the Conspiracy Period.

167. Defendants' illegal conduct continued until at least May 2011, when the DOJ issued a subpoena related to its investigation of anticompetitive behavior in the Cell and Battery market to one of the Defendants.

**10. Defendants' communications related to not only Cells, but also Batteries**

168. During the Conspiracy Period, on information and belief, Defendants engaged in discussions and attended meetings with representatives of competitors, during which they colluded regarding the output and price of Cells, which amounted to a conspiracy regarding the output and price of Batteries. They also exchanged information specifically about Battery prices, as described below.

169. On February 27, 2008, Albert Kim of LG Chem reported internally that Sanyo had "increased Cell price in March, and Pack price in April. It's identified that it differentially increased the prices by Cell Biz/ Pack Biz."

170. On March 27, 2007, LG Chem Senior Manager Jae Min Park wrote to LG Chem America Senior Manager You Sung Oh that Park had communicated with Samsung SDI "to decide to maintain 2Q pack price" for one of its customers.

171. Also on February 27, 2008, LG Chem Vice President Joon Ho Lee, LG Chem employee Deuk Yong Kwon, and Sanyo's General Manager Ikegami met at the Akasaka Restaurant. Minutes of that meeting reveal that the parties sought to "[i]dentify the timing of raising prices of Pack" and to set "the specific range of price increase."

172. On June 10, 2008, Jong Min (Mark) Lee of LG Chem provided a "Competitors' Price increase report" to several LG Chem executives. Among other things, Lee reported that MBI "plans to increase prices on July 1, and it would raise 3% for Pack, 5–6% for Cell." Lee explained that Sanyo "plans to increase Pack price on July 1, and Cell price starting from late June. It plans to raise 25 cent for all models."

173. On July 1, 2008, Sung Hwan Kim, Senior Manager for LG Chem reported to Jae Min Park, another Senior Manager for LG Chem, and Joon Ho Lee, Vice President for LG Chem's Notebook Division, that Samsung SDI "has increased the price of May to July (Dell's FY 2Q) Dell pack and the

1 amount of increase is known to be the same with the price increase level of cell . . . [¶] In addition, Seoul  
2 has confirmed that [Samsung SDI] is currently in negotiation with HP for pack price increase.”

3 174. On August 8, 2008, LG Chem Vice President Joon Ho Lee, LG Chem Team Leader Jae  
4 Kil Kim, LG Chem Assistant Manager Deuk Yong Kwon, and Panasonic’s General Manager  
5 Matsumoto held a meeting at the Lexington Hotel. LG Chem’s minutes of that meeting state, “Panasonic  
6 proposed that both [companies] should make efforts to normalize Japanese companies’ pack prices,  
7 since Japanese pack prices are relative[ly] low compared to other makers.”

8 **11. Government investigators targeted certain Defendants in connection with**  
9 **fixing the price of Batteries**

10 175. A globally coordinated antitrust investigation has taken place in at least the United States  
11 and Europe, aimed at suppliers of Cells and Batteries, including some or all of the Defendants.

12 176. Around June 28 2011, Sony Corporation disclosed in its Form 20-F for the fiscal year  
13 ending March 31, 2011 that its wholly-owned United States subsidiary, Sony Electronics, Inc., “received  
14 a subpoena from the United States Department of Justice (“DOJ”) Antitrust Division seeking  
15 information about its secondary battery business.” Sony further disclosed:

16 Sony understands that the DOJ and agencies outside the United States are  
17 investigating competition in the secondary batteries market. Based on the stage of  
18 the proceedings, it is not possible to estimate the amount of loss or range of  
19 possible loss, if any, that might result from adverse judgments, settlements or  
other resolutions of this matter.

20 177. Around August 20, 2012, LG Chem confirmed that it also was the target of the DOJ’s  
21 investigation.

22 178. News articles confirmed that, in addition to Sony and LG, Samsung SDI, Sanyo, and  
23 Panasonic were also under investigation by the DOJ for price fixing with respect to the sale of Batteries.

24 179. It is significant that Defendants’ anticompetitive behavior was the subject of a criminal  
25 grand jury investigation being conducted by the DOJ. For the DOJ to institute a grand jury investigation,  
26 a DOJ Antitrust Division attorney must believe that a crime has been committed and prepare a detailed  
27  
28

1 memorandum to that effect.<sup>5</sup> Following a review of that memorandum, the request for a grand jury must  
 2 be approved by the Assistant Attorney General for the Antitrust Division, based on the standard that a  
 3 criminal violation may have occurred. The Antitrust Division's "Standards for Determining Whether to  
 4 Proceed by Civil or Criminal Investigation" state: "In general, current Division policy is to proceed by  
 5 criminal investigation and prosecution in cases involving horizontal, *per se* unlawful agreements such as  
 6 price fixing, bid rigging and horizontal customer and territorial allocations."<sup>6</sup> Accordingly, the existence  
 7 of a criminal investigation into the market for Batteries supports the existence of the unlawful  
 8 conspiracy alleged in this Complaint.

9 180. On September 20, 2013, Sanyo Electric Co., Ltd. pled guilty to conspiring to fix prices in  
 10 violation of Section 1 of the Sherman Act. The conspiracy to which Sanyo Electric Co., Ltd. pled guilty  
 11 was one to fix the prices of cylindrical lithium ion battery cells sold in the United States and elsewhere  
 12 for use in notebook computer battery packs from about April 2007 to about September 2008. Sanyo  
 13 Electric Co., Ltd.'s factual admissions in its Plea Agreement included the following:

- 14 a. In furtherance of the conspiracy, Sanyo Electric Co., Ltd. and its parent Panasonic  
 15 Corporation, through their employees, engaged in discussions and attended  
 16 meetings with representatives of competitors, during which they reached  
 17 agreements to fix prices of cylindrical lithium ion battery cells.
- 18 b. The cells and packs containing the price-fixed cells, as well as payments for both,  
 19 traveled in interstate and foreign trade and commerce.
- 20 c. The business activities of Sanyo Electric Co., Ltd. and its co-conspirators were  
 21 within the flow of, and substantially affected, interstate and foreign trade and  
 22 commerce.

23  
 24  
 25 <sup>5</sup> See Antitrust Grand Jury Practice Manual, Vol. 1, Ch. I.B.1 (1991), *available at*  
 26 <http://www.justice.gov/atr/public/guidelines/206542.htm> (last accessed May 1, 2013).

27 <sup>6</sup> See Antitrust Division Manual, Chapter III.C.5, III-12 (Nov. 2012), *available at*  
 28 <http://www.justice.gov/atr/public/divisionmanual/chapter3.pdf> (last accessed May 1, 2013).



- d. Acts in furtherance of the conspiracy were carried out within the Northern District of California. Cells and battery packs containing the price-fixed cells were sold by one or more of the conspirators to customers in that District.

181. On October 10, 2013, LG Chem, Ltd. pled guilty to conspiring to fix prices in violation of Section 1 of the Sherman Act. The conspiracy to which LG Chem, Ltd. pled guilty was one to fix the prices of cylindrical lithium ion battery cells sold in the United States and elsewhere for use in notebook computer battery packs from about April 2007 to about September 2008. LG Chem, Ltd.'s factual admissions in its Plea Agreement included the following:

- a. In furtherance of the conspiracy, LG Chem, Ltd., through its employees, engaged in discussions and attended meetings with representatives of competitors, during which they reached agreements to fix prices of cylindrical lithium ion battery cells.
- b. The cells and packs containing the price-fixed cells, as well as payments for both, traveled in interstate and foreign trade and commerce.
- c. The business activities of LG Chem, Ltd. and its co-conspirators were within the flow of, and substantially affected, interstate and foreign trade and commerce.
- d. Acts in furtherance of the conspiracy were carried out within the Northern District of California. Cells and battery packs containing the price-fixed cells were sold by one or more of the conspirators to customers in this District.

182. As set forth in this Complaint, the period to which LG Chem, Ltd. and Sanyo Electronic Co., Ltd. pled guilty represents a negotiated-for admission to participating in only a portion of the Conspiracy Period and does not represent the totality of their conduct.

#### **H. DEFENDANT U.S. SUBSIDIARY VIOLATIONS**

183. In addition to the conduct described above, Defendants LG Chem America, Inc., Samsung SDI America, Inc., Panasonic Corporation of North America, Sanyo North America Corporation, Sony Electronics, Inc., and Maxell Corporation of America (collectively, "U.S. Subsidiary

1 Defendants”) each consciously agreed to participate in, and can be charged with knowledge of, the  
2 conspiracy described herein.

3 **1. LG Chem America, Inc.**

4 184. On information and belief, LG Chem America, Inc. consciously agreed to participate in,  
5 and can be charged with and had knowledge of, the conspiracy during the Conspiracy Period.

6 185. For example, on September 8, 2006, David Son (Global Sales Manager, LG Chem, Ltd.)  
7 forwarded an email to Jung Han Park (Assistant Manager, LG Chem America, Inc.), Sang Woo Kim  
8 (Manager, LG Chem America, Inc.), and Yoo Sung Oh (Manager, LG Chem America, Inc.), which  
9 noted that “there is no reason not to agree with SDI’s proposal for maintaining the price” and “I think it  
10 would be good to discuss with HQ/U.S./Taiwan through con-cal next week.”

11 186. On October 10, 2006 Young Sun Kim (then General Manager, LG Chem America, Inc.)  
12 sent an e-mail to Yoo Sung Oh (Manager, LG Chem America, Inc.) and others voicing a concern about  
13 Samsung SDI’s supply to Hewlett Packard. Therein, Kim directed the recipients to “please double-check  
14 SDI’s direction and check again that SDI does not cut cell prices.”

15 187. On May 16, 2008, LG Chem, Ltd. learned from Samsung SDI that Samsung SDI agreed  
16 to increase prices for Batteries effective June 2008, and directed LG Chem, Ltd.’s employees to share  
17 the information with its overseas branch offices.

18 188. An LG Chem, Ltd. email dated June 10, 2008 confirmed that Sony would increase  
19 Battery prices as of June 15, 2008, and that Samsung SDI, MBI, and Sanyo would implement  
20 corresponding price increases by July 1, 2008. Meeting minutes from a June 2008 meeting involving LG  
21 Chem America, Inc.’s offices in the United States contained a chart that included further detail on these  
22 price increases.

23 189. On July 2, 2008, Jae Min Park (Senior Manager, LG Chem America, Inc., who  
24 previously served as Senior Manager, LG Chem, Ltd.) advised another Senior Manager that he would  
25 check on Battery pack pricing for Hewlett Packard with “a sojourning employee” of Samsung SDI in the  
26 United States.

190. On September 3, 2008, Jae Kil Kim (Senior Manager, LG Chem, Ltd.) emailed Jae Min Park (Senior Manager, LG Chem America, Inc.) to share “market trend information figured out today with [Samsung SDI] Company.” Samsung SDI “is much focused on figuring out the industry’s trend, told us to basically move together, and has decided to delay a price cut and minimize a decrease level as much as possible.” The parties also planned to meet again.

191. In 2010, multiple emails involving Dong Woo (Donny) Lee (Manager, LG Chem America, Inc.) evidence discussions with competitors, including Samsung SDI and Samsung SDI America. In these communications, Lee was directed by LG Chem, Ltd. to reach out to his counterpart at Samsung SDI America regarding pricing to Apple. Not only did Lee communicate with Samsung SDI America, but he relayed that information to LG Chem, Ltd.

## 2. Samsung SDI America, Inc.

192. On information and belief, Samsung SDI America, Inc. consciously agreed to participate in, and can be charged with and had knowledge of, the conspiracy during the Conspiracy Period.

193. During the Conspiracy Period, Yo An Oh served in multiple senior positions at Samsung SDI Co., Ltd., including as Sales Group General Manager (2002-05), Vice President North America (2006-09), and Vice President Battery Marketing Team (2010). While he was the Vice President of North America in 2006-07, Oh simultaneously served as the President of Samsung SDI America, Inc.

194. Oh was an active participant in the conspiracy alleged herein while he was at Samsung SDI Co., Ltd. For example, in June 2004, Oh met with Sony’s President at Sony’s headquarters to discuss the battery market and pricing of batteries. Sony’s President stated that he was glad that “SDI and Sony . . . [have] been able to cooperate with each other at the same time as entities participating in the same business.”

195. In October 2005, Oh and others at Samsung SDI Co., Ltd. met with Matsushita in Osaka to discuss supply and demand in the battery business, maintaining price, and intended expansion of the battery business. The parties agreed to cooperate going forward and “suggested regular meetings once every three months,” with the next meeting in January 2006 in Seoul.

196. As described above, in July 2005, Oh had lunch with Jae Min Park, then-Senior Manager for LG Chem, Ltd. During their meeting, Oh agreed to fix cylindrical Battery prices and “[p]roposed to minimize damages caused by unnecessary competition in dealing with customers by communicating with each other in the future.”

197. Oh knew about and continued to participate in the conspiracy after he moved to Samsung SDI America, Inc. For instance, in June 2007, an employee of the Mobile Energy Business Team of Samsung SDI Co., Ltd. summarized a telephone call with a manager from LG Chem, Ltd. in which the parties exchanged information regarding inventory, compensation, and business issues. This email was sent to, among others, Yo An Oh, then-President of Samsung SDI America, Inc.

198. As noted above, Dong Woo (Donny) Lee of LG Chem America and his counterpart at Samsung SDI America met with each other in December 2010 at LG Chem America’s office in San Jose, California, and discussed pricing to Apple that had been approved by Oh, who by then had returned to work for Samsung SDI Co., Ltd. as Vice President Battery Marketing Team.

### 3. Panasonic Corporation of North America

199. On information and belief, Panasonic Corporation of North America consciously agreed to participate in, and can be charged with and had knowledge of, the conspiracy during the Conspiracy Period.

200. On September 23, 2003, Thomas Kowalak, an employee of Panasonic Corporation of North America, “had a meeting with Sanyo’s Account manager today to discuss the battery business at Dell.”

201. On July 19, 2005, Damian Pascas, an employee of Panasonic Corporation, apprised various employees of Panasonic Corporation of North America (including Thomas Kowalak), as well as employees of Panasonic Corporation, of Dell’s e-auction results. Pascas advised that he obtained the information “directly from someone at Sony” as to Sony’s bid limits and that such information could not be shared with Dell.

202. In August 2005, Panasonic Corporation employee Yasushi Matsumoto emailed Robert Rauh (Panasonic Industrial Company, a division of Panasonic Corporation of North America) to pass

1 along information he obtained regarding Sanyo and Sony battery development. Matsumoto advised  
 2 Rauh to “direct Tom [Thomas Kowalak] & Donna [Brewster, also in the U.S.] to UTILIZE this [sic]  
 3 ingredients to gather competitors’ information during its fresh period!!!” Rauh forwarded Matsumoto’s  
 4 email as directed; Kowalak responded, “I did meet most of competitors at the BITS training today,  
 5 including folks from Samsung, Simplo, Sanyo and LG Chem. I’ll start building the relationships so as to  
 6 learn what they have in their bag of tricks.”

7 203. On July 19, 2006, Panasonic Corporation personnel conferred with “Sanyo Energy”  
 8 regarding the battery business, including Sanyo’s intentions with regard to certain customers. This  
 9 email, containing competitor information, was forwarded to Robert Rauh and others affiliated with  
 10 Panasonic Corporation of North America on July 21 by Panasonic Corporation personnel (Takahiro  
 11 Yoshida).

12 204. On July 7, 2010, pricing information for customer “B&D” was obtained directly from  
 13 Sony – “I got information from Sony.” This information was then sent to a number of individuals  
 14 affiliated with Panasonic Corporation of North America, including Barbara Lahey, Senior Account  
 15 Manager at Panasonic Industrial Company, who was attempting to quote a price to B&D. Other United  
 16 States employees on this email chain include Shuzo Yamada and Hiro Matsuno.

#### 17 4. Sanyo North America Corporation

18 205. On information and belief, Sanyo North America Corporation consciously agreed to  
 19 participate in, and can be charged with and had knowledge of, the conspiracy during the Conspiracy  
 20 Period.

21 206. On May 1, 2003, an account executive from Sanyo Energy (USA) Corporation, a division  
 22 of Sanyo North America Corporation, emailed Sanyo Electric Co. Ltd. and noted that “[s]ince the  
 23 November 30, 2001 Battery Supplier Meeting, there has NOT been another meeting bringing all battery  
 24 suppliers together to discuss direction and opportunities.” This email was circulated to other individuals  
 25 at both the U.S. and Japanese Sanyo entities in June 2010. On October 25, 2006, Takanao Matsumoto of  
 26 Sanyo Energy (USA) Corporation, a division of Sanyo North America Corporation, contacted Katsuo  
 27  
 28

1 Seki of NEC Tokin Corporation seeking to exchange information regarding Motorola. Matusumoto and  
2 Seki spoke by telephone and arranged to meet in person that evening.

3 207. In January 2007, Matsumoto and Seki exchanged information on a number of occasions  
4 regarding Motorola and also set up a meeting between NEC Tokin's Director of Batteries and the  
5 President of Sanyo Electric Co., Ltd. The dinner was scheduled for February 19, 2007 in Tokushima.

6 208. On March 19, 2007, Matsumoto contacted Seki and stated "I hope ...we could exchange  
7 the information separately again." (Ellipses in original.) The following day, Matsumoto made contact  
8 with NEC Tokin and obtained information regarding its intentions with regard to future pricing to  
9 Motorola. Matsumoto asked that the recipients of his email reporting on the NEC Tokin contact "destroy  
10 this e-mail immediately."

11 209. Also in March 2007, Matsumoto (Sanyo Energy (USA) Corporation) wrote to Mr.  
12 Noguchi (Sanyo Mobile Energy in Japan), "I have been occasionally exchanging the information with  
13 NEC Tokin for some time while drinking until we get drunk in Tokyo. The person at the other side is an  
14 executive managing director. . . . On the other hand, as for Hitachi Maxell, [Mitsuru Iguchi of Sanyo GS  
15 Soft Energy Co., Ltd. (joint venture of GS Yuasa Corporation and Sanyo Electric Co. Ltd.)] has been  
16 contacting underneath the surface. We expect to acquire the information in a few days, so I will forward  
17 it to you again."

18 210. On June 4, 2007, Matsumoto received an email from Iguchi (Sanyo GS Soft Energy Co.,  
19 Ltd.) in which Iguchi relayed information he acquired from a Maxell entity, including its production  
20 capacity, packing process, price negotiations with customers, shipping routes and future purchasing  
21 plans, and shared that information with Sanyo Electric Co. Ltd.

22 211. Communications between Matsumoto (Sanyo Energy (USA) Corporation) and Seki  
23 (NEC Tokin Corporation) picked up again in June 2007. The competitors exchanged information  
24 regarding price increases and other competitive matters, which was shared with individuals at Sanyo  
25 Electric Co. Ltd. and Sanyo GS Soft Energy Co., Ltd.

26 212. On June 12, 2008, Matsumoto revealed that he was able to confirm Sanyo's competitors  
27 pricing "through separate top-secret information."  
28

1           213. In November 12, 2008, Howard Lim of Sanyo Energy (USA) Corporation sent “Battery  
2 Power 2008” conference notes in an email to other United States-based employees and stated,  
3 “Conference was by chance participated by [sic] marketing group members of Samsung SDI – they will  
4 be important contacts for us going into future [sic] for competitive information.”

5                   **5. Sony Electronics, Inc.**

6           214. On information and belief, Sony Electronics, Inc. consciously agreed to participate in,  
7 and can be charged with and had knowledge of, the conspiracy during the Conspiracy Period.

8           215. In 2006, for example, a slide presentation prepared by Sony Electronics, Inc. relayed  
9 information obtained from LG Chem regarding LG Chem’s stance on investments, profits, and  
10 productivity. The slide captioned “Current State of Competitors – LG Chem,” directly quotes LG Chem  
11 as desiring to avoid a decline in prices.

12           216. In mid-October 2006, just a few months before being promoted to Director of Sony  
13 Electronics, Inc., Robert McCaul (then of Sony Corporation) met H.J. Moon of Samsung SDI  
14 (Germany) at a Nokia supplier logistic day. A few days after meeting Moon, on October 16, McCaul  
15 emailed Moon saying “It was quite nice to meet with you last week.” On October 17, Moon invited  
16 McCaul to visit Japan, stating “then it will be good chance to meet each other,” to which McCaul  
17 offered two dates. Moon confirmed his arrival for a visit and wrote that he would call McCaul when he  
18 arrived.

19           217. Following his move to Sony Electronics, Inc., McCaul communicated directly with  
20 Damian Pascas of Panasonic about Dell’s confidential supplier rankings in March 2007.

21           218. McCaul was also involved in several communications between Sony Corporation and  
22 Sony Electronics, Inc., wherein the two entities discussed pricing; Sony directed Sony Electronics, Inc.  
23 to gather information regarding competitor pricing; and Sony Electronics, Inc. funneled competitive  
24 information to Sony.

25           219. Following his move to Sony Electronics, Inc., in mid-June through early July 2007,  
26 McCaul and others were included in a series of email communications among Sony personnel regarding  
27 bids for a forthcoming Dell internet auction. In particular, McCaul received an email request from Sony  
28



1 Taiwan Ltd.'s Division President Takeshi Nakayama to Sony Corporation General Manager Taku  
 2 Katahira, "to check whether other companies have intentions to raise the prices at this Dell I/N ...." In  
 3 response, Katahira commented that "I heard that S S P has talked about the increase in price of materials  
 4 last week and have been following up in the US this week. I couldn't get a hold of L." As alleged above,  
 5 Defendants used code to describe their competitors: "S S P" referred to Samsung SDI, Sanyo, and  
 6 Panasonic, and "L" referred to LG Chem. In this same email chain (on which McCaul was a recipient),  
 7 Katahira was asked to find out how price negotiations went in the United States for the "current increase  
 8 in the price of cobalt."

9 220. On May 16, 2008, McCaul communicated with Sony Corporation regarding pricing for  
 10 Apple project "N82" and how Apple is rejecting any price increases. Not only did McCaul provide a  
 11 chart demonstrating how Sony's current price compares to its competitors' pricing (including Samsung  
 12 SDI Co., Ltd.), McCaul also related his understanding of what Sony's competitors intended to do  
 13 regarding pricing to Apple in the next quarter.

14 221. On October 30, 2008, Sony personnel had further discussions about Apple's "N82"  
 15 project and Apple's desire to reduce prices. Keishi Hayasaka (then Sony Corporation, but later Sony  
 16 Energy Devices Corporation) directed McCaul and Yuki Walsh (both of Sony Electronics, Inc.) and  
 17 employees of Sony China Ltd. to advise him if they received any price reduction requests from Apple or  
 18 Foxconn and to "please tell me the competitor's pricing information, when you get [it] from them."

19 222. In December 2008, Sony was again engaged in internet negotiations with Dell. In an  
 20 email from Tomohiko Nagashima (then Sony Corporation, but later Sony Energy Devices Corporation)  
 21 to Robert McCaul, Steve Jaska, and Yuki Walsh (Sony Electronics, Inc.) about the matter, Nagashima  
 22 reiterated the importance of checking with competitors before bidding: "Although [Dell] requests a \$30  
 23 level, but [sic] if competitors will not propose such level, we should not offer such price to Dell. So it is  
 24 important to check competitors [sic] status."

25 223. On October 1, 2009, McCaul wrote in an email that he would be at headquarters in Japan  
 26 on a business trip and asked his United States counterparts at Sony for updates on their Mobile/PC  
 27 customers so he could get answers from Japan. Sony's United States employees gave a status update on  
 28 the Motorola account and asked headquarters what prices Japan wanted to quote to Motorola. On May

1 19, 2010, McCaul (Sony Electronics, Inc.) emailed Koichi Fukata (Sony Energy Devices Corporation)  
 2 asking for pricing for a RIM project. In his email to Fukata, McCaul identified Sanyo's price to RIM as  
 3 "below \$3.50."

4 224. As of no later than April 1, 2011, Sony's United States sales team, including McCaul and  
 5 Jaska, had become part of Sony Energy Devices Corporation in Japan.

6 **I. THE PRICE MOVEMENTS OF BATTERIES DURING THE CONSPIRACY**  
 7 **PERIOD ARE CONSISTENT WITH COLLUSION, NOT COMPETITION**

8 225. Defendants' regular, collusive communications, agreements, and other conduct over more  
 9 than a decade, as alleged above, establish Defendants' acts in furtherance of their conspiracy. As  
 10 explained and below, pricing behavior, capacity utilization, and the structural and other characteristics of  
 11 the Battery market further demonstrate the existence of Defendants' conspiracy.

12 226. Many analysts predicted that, given technological changes and the economics of the  
 13 marketplace, Battery prices would fall during the Conspiracy Period. In fact, prices not only failed to  
 14 decline throughout most of the Conspiracy Period, they rose.

15 227. The initial period, from 2000 to 2002, was marked by declining prices corresponding to  
 16 the entry of Korean firms into the Battery market. Nonetheless, as a result of Defendants' collusive  
 17 communications, Battery prices declined less rapidly than they would have in a competitive market. By  
 18 2002, prices stabilized, and then started to increase from 2003 to 2008. In late 2008, Battery prices  
 19 declined along with the demand shock of the global recession. However, Defendants quickly stabilized  
 20 this decline. By mid-2009, prices again were relatively flat until the DOJ investigation was publicly  
 21 announced in June 2011, at which point prices dropped.

22 228. Numerous technical studies undertaken throughout the 2000s predicted that scale  
 23 economies and learning curves would act to lower cost as production volumes expanded. For example,  
 24 one study concluded, "while the NiMH [nickel metal hydride] battery is nearing fundamental practical  
 25 limits . . . lithium ion batteries are still improving. With continued improvements in charge storage  
 26 capability, lithium-ion's advantage will become more pronounced with the passage of time. . . . Though  
 27 this trend has slowed somewhat in recent years with the maturation of cobalt- and nickel metal-oxide  
 28

1 based lithium-ion batteries, other materials have the potential to allow for continued growth. . . .”<sup>7</sup> The  
 2 availability of alternative materials for Battery composition allowed for continued increases in energy  
 3 density during the Conspiracy Period. This trend of increasing energy density is anticipated to continue  
 4 into the future. The improved safety and energy characteristics of these materials led analysts to forecast  
 5 that Batteries would overtake NiMH as the predominant battery technology in that product market,  
 6 opening up additional opportunities for economies of scale.

7 229. The authors of a 2006 study observed that “[i]n addition to this fundamental advantage  
 8 with respect to specific energy and power, lithium ion batteries also offer the potential for lower cost as  
 9 the technology matures and production volumes increase. Although more expensive than NiMH  
 10 batteries today, Lithium Ion Batteries scale more readily to high volume production hence have greater  
 11 potential for cost reduction.”<sup>8</sup>

12 230. Basic economic principles support the notion that, in a competitive market, increasing  
 13 volumes of production should have been associated with continuing price declines for Batteries.

14 231. A 2004 industry report forecasted that prices would decline by 7% per year between 2004  
 15 and 2008. Instead, because of the actions of Defendants and their Co-Conspirators, average prices for  
 16 Batteries rose by almost 11% between January 2004 and January 2008. Actual prices did not experience  
 17 a decline until late 2008 and early 2009, when the economic recession took hold.

18 232. Even following the price drops occasioned by the downward demand of the recession,  
 19 Battery prices stabilized—yet again—until Sony’s public announcement of having received a DOJ  
 20 subpoena on June 28, 2011. Battery prices dropped significantly thereafter. Average prices fell by  
 21 nearly 7% between June and July 2011 and continued to decline in subsequent months through the end  
 22 of 2011.

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 24  
 25 <sup>7</sup> Kromer, M.A., & Heywood, J.B., *Electric Powertrains: Opportunities and Challenges in the*  
 26 *U.S. Light-Duty Vehicle Fleet*, Cambridge, MA: Sloan Automotive Laboratory, Massachusetts Institute  
 of Technology (2007), available at [http://web.mit.edu/sloan-auto-](http://web.mit.edu/sloan-auto-lab/research/beforeh2/files/kromer_electric_powertrains.pdf)  
 27 [lab/research/beforeh2/files/kromer\\_electric\\_powertrains.pdf](http://web.mit.edu/sloan-auto-lab/research/beforeh2/files/kromer_electric_powertrains.pdf), at p. 36.

28 <sup>8</sup> *Id.* Citing Miller, T. Hybrid Battery Technology and Challenges. Technology Review’s  
 Emerging Technology Conference, 9/28/2006.

**J. DEFENDANTS' CAPACITY UTILIZATION DURING THE CONSPIRACY PERIOD IS CONSISTENT WITH COLLUSION, NOT COMPETITION**

233. While Defendants expanded their production capacity during the Conspiracy Period, in the latter years a significant amount of that capacity was under-utilized, but prices remained stable. These circumstances are consistent with Defendants' collusive behavior rather than a competitive market.

234. In early 2008, in anticipation of long-term growth in hybrid-electric and electric vehicle production, many Defendants announced plans to expand their Battery production capacity. In Japan, Panasonic announced that it would raise its capacity by 83%, Sony announced plans to raise its capacity by 80%, and Sanyo announced that it would raise its capacity by 36%. Among the Korean manufacturers, Samsung SDI announced plans to raise its capacity by 93% and LG Chem announced that it would raise its capacity by 86%.

235. This capacity expansion was ill-timed because the fourth quarter of 2008 saw the onset of a worldwide economic crisis and a corresponding decline in demand for Batteries. By the first quarter of 2009, Defendants' shipments of Batteries dropped significantly from mid-2008 highs. Industry analysts predicted that Defendants' new capacity, combined with lower demand for consumer electronic products, would result in an oversupply of Batteries. But despite the anticipated glut and decreased demand, prices ultimately stabilized and began to increase.

236. To stem the late 2008–09 price decline due to capacity expansion during an economic crisis, Defendants cut production in a coordinated fashion. As a result, prices for Batteries stabilized by the end of 2009.

237. Basic economic principles teach that over time prices tend to decrease as the capacity available to supply those products increases relative to total demand. Conversely, when capacity is constrained, competitively set prices may increase rapidly.

238. When demand for Batteries decreased at the onset of the recession in 2008, shipments, pricing, and capacity utilization all decreased. Yet, by the beginning of 2009, despite under-utilization of existing (and new) capacity, Battery pricing stabilized. After the first quarter of 2009, shipments

1 returned to their pre-recession growth path, but capacity utilization remained at levels below pre-  
2 recession levels.

3 239. Price stability when capacity is under-utilized is not consistent with a competitive market.  
4 In a competitive market, firms would be expected to increase their individual capacity utilization rates to  
5 gain market share, which would have caused further price declines. Instead, the price of Batteries  
6 increased and then remained relatively flat with capacity remaining under-utilized. Such behavior is  
7 much more consistent with market collusion than with a freely competitive market.

8 **K. THE STRUCTURE AND CHARACTERISTICS OF THE BATTERY MARKET**  
9 **AND OTHER FACTORS RENDER THE CONSPIRACY ECONOMICALLY**  
10 **PLAUSIBLE**

11 240. In addition to the numerous acts in furtherance of Defendants' conspiracy to fix, raise,  
12 stabilize, and maintain the price of Batteries during the Conspiracy Period, the structure and other  
13 characteristics of the Battery market in the United States are conducive to a price-fixing agreement and  
14 made collusion particularly attractive to Defendants.

15 241. Specifically, the Battery market (1) has high barriers to entry and (2) is concentrated. In  
16 addition to these market characteristics, (3) Defendants' history of colluding to fix prices for critical  
17 components of consumer electronics and (4) the existence of trade associations and other common  
18 forums all support and facilitate the existence of the conspiracy Plaintiffs allege in this Complaint.  
19 Accordingly, the conspiracy was economically plausible.

20 **1. The Battery market has high barriers to entry**

21 242. A collusive arrangement that raises product prices above competitive levels would, under  
22 basic economic principles, attract new entrants seeking to benefit from the supracompetitive pricing.  
23 Where, however, there are significant barriers to entry, new entrants are less likely. Thus, barriers to  
24 entry help to facilitate the formation and maintenance of a cartel.

25 243. During the Conspiracy Period and continuing today, substantial barriers impede entry  
26 into the Battery market. A new entrant into the market would face costly and lengthy start-up costs,  
27 including multi-million dollar costs associated with research and development, manufacturing plants,  
28

1 equipment, energy, transportation distribution infrastructure, skilled labor, long-standing customer  
2 relationships, safety and quality assurance, and reduction of high failure rates.

3 244. Defendants themselves acknowledged the substantial costs of entering the market. For  
4 example, during a November 21, 2002 meeting with LG, Yasuhiro Hosozawa, the Senior General  
5 Manager of the PCC Business Division for Sony Corporation's Core Technology & Network Company,  
6 recognized that "this is a business requiring a huge cost including R&D cost because technological  
7 capability is necessary to do this business." Mr. Hosozawa stated that the enhanced performance of  
8 TFT-LCD technology was only "possible after 30 years of research and development, and as for Li-Ion,  
9 it's only been 10 years, so there must be continued R&D efforts." LG Chem's Senior Manager Seok  
10 Hwan Kwak agreed with Mr. Hosozawa's assessment.

11 245. Late-coming Chinese battery suppliers, who might otherwise compete with Defendants,  
12 limited their production plans and product lines due to the high cost of entry. For example, in 2007,  
13 Chinese supplier Tianjin Lishen Battery Joint-Stock Co., Ltd. ("Lishen") was not aggressive in entering  
14 the cylindrical battery business because it could not secure uniform product quality without a substantial  
15 financial investment in equipment. Lishen already had postponed expanding into cylindrical batteries  
16 when LG Chem began manufacturing Batteries in Nanjing in 2005.

17 246. One of the biggest barriers to entry into the Battery market is the high cost of fabrication  
18 plants ("fabs") where the batteries are manufactured. In 2011, Panasonic announced that it planned to  
19 build a new fab in China that would cost up to \$366 million. Also in 2011, LG Chem announced that it  
20 planned to build two new fabs in South Korea and the United States that would cost \$1.84 billion. In  
21 2012, Samsung SDI announced that it would invest over \$700 million over the next five years to  
22 upgrade its Malaysian factory in order to manufacture Batteries.

23 247. In addition to the large costs of building a plant, given the nature of the materials used in  
24 Batteries, any new entrant would be required to comply with environmental regulations in whatever  
25 jurisdiction such plant is built. Compliance would require extensive testing and the receipt of  
26 government approvals, all of which would take many years.

27 248. Defendants also own multiple patents for Batteries. These patents place a significant and  
28 costly burden on potential new entrants, which must avoid infringing on the patents when entering the

1 market with a new product. Samsung SDI, Panasonic, Sony, Sanyo, and LG Chem account for more  
2 than 80% of the patents filed in the United States for Batteries.

### 3 **2. The Battery market is concentrated**

4 249. A concentrated market is more susceptible to collusion and other anticompetitive  
5 practices. The Battery market was concentrated during the Conspiracy Period. On information and  
6 belief, throughout the Conspiracy Period, Defendants and their Co-Conspirators together have  
7 maintained extremely high market shares, ranging from 73% to 95% of the applicable market.

8 250. Empirical scholarship on cartels has primarily focused on a concentration measure called  
9 the CR4—the four-firm concentration ratio, the share of product sales accounted for by the four largest  
10 firms—as a diagnostic in analyzing what levels of concentration facilitate multi-firm collusion.

11 251. During the Conspiracy Period, the Battery market’s four-firm concentration ratio was  
12 dangerously high. That ratio exceeded 60 percent in the market for all of the Conspiracy Period, topping  
13 80 percent in some years.

14 252. As recently as 2011, one market report wrote that “The Big 3 of Panasonic, Samsung  
15 SDI, and LG Chem have a combined market share of over 60% and the market is increasingly becoming  
16 an oligopoly.”<sup>9</sup> The manufacture and sale of Batteries was approximately a \$9.3 billion industry as of  
17 2011 and is predicted to continue growing.

### 18 **3. Defendants have a history of colluding to fix prices for critical components of** 19 **electronics**

20 253. Many Defendants and their affiliates have a long history of criminal collusion and are  
21 either currently involved in worldwide competition authority investigations into other technology-related  
22 markets or have been convicted of participating in price-fixing cartels involving technology-related  
23 products. Much of the illegal conduct to which Defendants or their affiliates have admitted took place  
24 during the Conspiracy Period identified in this Complaint.

25  
26  
27 <sup>9</sup> Citi Research, *Lithium Ion Batteries: A Japanese Tech Growth Story?*, At 73 (20 July 2012)  
28 (available at [http://pg.jrj.com.cn/acc/Res/CN\\_RES/INDUS/2012/7/20/6eafe981-bdeb-45ac-a56c-be734abb9fd7.pdf](http://pg.jrj.com.cn/acc/Res/CN_RES/INDUS/2012/7/20/6eafe981-bdeb-45ac-a56c-be734abb9fd7.pdf)).



1           254. A notebook computer contains four key pieces of hardware: a dynamic random access  
2 memory (“DRAM”) chip, a thin-film transistor liquid crystal display (“TFT-LCD”) screen, an optical  
3 disk drive (“ODD”), and a Lithium Ion Battery. Several Defendants and/or their affiliates have pled  
4 guilty to fixing the prices of the first three of these components, and the DOJ investigated criminal price-  
5 fixing charges for the fourth component—Batteries. Similarly, mobile phones contain two of these  
6 components: TFT-LCD screens and Batteries.

7           255. Nokia purchased TFT-LCD and other LCD screens from several of the Defendants.  
8 Nokia brought antitrust claims based on these purchases.

9           256. Around October 2005, Samsung Electronics Company, Ltd. and Samsung  
10 Semiconductor, Inc., affiliates of the Samsung SDI Defendants, pled guilty and paid a \$300 million fine  
11 for “participating in an international conspiracy to fix prices in the [DRAM] market” from  
12 approximately April 1, 1999 through June 15, 2002. In addition, six Samsung Electronics Co. Ltd.  
13 executives pled guilty to participating in the conspiracy with respect to DRAM. Each paid a \$250,000  
14 criminal fine and served a prison sentence in the United States ranging from seven to fourteen months.

15           257. In November 2008, LG Display Co., Ltd. (“LG Display”), an affiliate of the LG Chem  
16 Defendants, pled guilty and paid a \$400 million fine to the United States in connection with its  
17 participation in a worldwide conspiracy to fix the prices of TFT-LCD screens during the period from  
18 September 2001 through June 2006. At the time, LG Display paid the second-highest fine ever imposed  
19 by the Antitrust Division of the DOJ. In addition, in April 2009, an executive of LG Display pled guilty  
20 to participating in the global TFT-LCD conspiracy from September 2001 through June 2006, served 12  
21 months in a federal prison, and paid a \$30,000 criminal fine. In February 2009, another LG Display  
22 executive pled guilty to participating in the global conspiracy with respect to TFT-LCDs from  
23 September 2001 through December 2006.

24           258. In March 2009, Hitachi Displays, Ltd., an affiliate of the Hitachi Maxell Co-  
25 Conspirators, pled guilty and paid a \$31 million fine for participating in that same TFT-LCD conspiracy  
26 during the period from April 2001 through March 2004.

27           259. Around March 2011, Defendant Samsung SDI Co., Ltd. pled guilty and paid a \$32  
28 million fine for participating in a “global conspiracy to fix prices, reduce output, and allocate market

1 share of color display tubes, a type of cathode ray tube used in computer monitors and other specialized  
 2 applications” from approximately January 1997 through at least March 2006. Also in March 2011, the  
 3 Korean Fair Trade Commission issued a public report that identified Samsung SDI employees who  
 4 participated in collusive meetings and agreements with competitors in the cathode ray tube industry.  
 5 Several of the identified employees also worked as senior executives in Samsung SDI’s Battery  
 6 business.

7 260. In September 2010, Defendant Panasonic Corporation pled guilty and paid a \$49.1  
 8 million fine for participating in a conspiracy to “suppress and eliminate competition by fixing prices to  
 9 customers of household compressors” during the period October 14, 2004 through December 31, 2007.

10 261. In September 2011, Hitachi-LG Data Storage, Inc. (a joint venture between Japanese  
 11 company Hitachi, Ltd. and Korean company LG Electronics, Inc.) pled guilty and paid a \$21.1 million  
 12 fine for participating in various bid-rigging and price-fixing conspiracies for ODDs during the period  
 13 from June 2004 through September 2009.

14 262. The foregoing pattern of anticompetitive practices in various technology-related markets  
 15 is illustrative of Defendants’ corporate conduct, which has included illegal activity aimed at generating  
 16 profits at the expense of their customers.

#### 17 **4. Trade associations and other common forums facilitated Defendants’** 18 **collusion**

19 263. On information and belief, Defendants are members of several battery trade associations,  
 20 which they used to facilitate their conspiratorial conduct.

21 264. Panasonic, Sanyo, Sony, and Hitachi Maxell, and a Samsung SDI affiliate are all  
 22 members of the Battery Association of Japan (“BAJ”). The BAJ’s stated purpose is to “promote[]  
 23 research and development of batteries and battery applied products.” Among its primary tasks is  
 24 participating in international working groups and conferences “in order to exchange information and  
 25 promote international collaboration.” Samsung SDI and LG Chem are members of the Battery R&D  
 26 Association of Korea (“KORBA”), which Defendants described as “the counterpart of the BAJ.”

27 265. Defendants used the BAJ to facilitate collusive price increases. For example, in a March  
 28 2, 2004 high-level meeting between Sony and LG Chem, Sony revealed to LG Chem that it had “pushed

BAJ (Battery Association of Japan) to help with this issue [*i.e.*, raising prices], and BAJ will ask companies for cooperation through various channels.” Principals at this meeting from Sony included Yutaka Nakagawa (Deputy President of Micro Systems Network Company (“MSNC”) and President of Energy Company, the division of Sony that produces Lithium Ion Batteries), Hirokazu Kamiyama (Division Leader of MSNC), and Toshiaki Naito (General Manager of cellular battery division). Principals for LG Chem included Soon Yong Hong (Executive Vice President and President of I&E Materials), Director Myung Hwan Kim (Battery Division leader), and Senior Manager Seok Hwan Kwak.

266. Defendants also used the trade associations to cooperate with each other and inhibit other entrants into the Batteries market. For instance, during a top management meeting in July 2005, Mitsuru Honma, the group leader for Sanyo’s division responsible for rechargeable batteries, and LG Chem’s CEO Noh Ki-ho discussed using BAJ and KORBA to cooperate, facilitate exchanges of technology, and establish safety standards. Similar discussions were held during a September 2005 top meeting between Toru Ishida, the President of MBI, and LG Chem’s Mr. Noh. At the time these meetings occurred, Mr. Ishida was the President of the BAJ, Mr. Honma was the Vice President of the BAJ, and Mr. Noh was the CEO of KORBA. LG Chem’s minutes of these meetings explain that setting safety standards not only protected customers, but also enabled Defendants to “prevent[] Chinese companies . . . from entering the market with low prices alone.”

267. Defendants continued to use the trade associations to prevent new market entrants and increase prices throughout the Conspiracy Period. Notes of a February 2008 meeting between senior executives of Panasonic and LG Chem refer to Panasonic General Manager Matsumoto as saying, “Battery regulations, such as BAJ, can ultimately stop new makers, whose product qualities are not stable, from entering the market, while emphasizing safety technologies’ importance to customers and helping the cell makers receive premium prices for the technologies. Therefore, it [Panasonic] is aggressively supporting the activities, and asked us [LG] to actively join the moves.”

**L. PLAINTIFFS' INJURY**

268. Plaintiffs have suffered a direct, substantial, and reasonably foreseeable injury as a result of Defendants' and their Co-Conspirators' agreement to raise, fix, or maintain the price of Cells and Batteries at artificial levels. During the Conspiracy Period, Defendants' and their Co-Conspirators' price-fixing agreement artificially inflated the price of Batteries purchased by Nokia, causing Nokia to pay higher prices for Batteries than it would have in the absence of the conspiracy. Nokia purchased over nine hundred million dollars of Batteries in the United States at these inflated prices. Plaintiffs are the owners of the claims resulting from these purchases. This is the kind of injury the antitrust laws were designed to punish and prevent.

**M. FRAUDULENT CONCEALMENT**

269. Neither Plaintiffs nor Nokia had knowledge of the combination or conspiracy alleged in this Complaint or of facts sufficient to place them on inquiry notice of their claims until the public disclosures of the government investigations into Cell and Battery price-fixing began at the end of June 2011.

270. Prior to the public disclosure of government investigations beginning in June 2011, no information in the public domain or available to Plaintiffs, Nokia, or other victims suggested that any Defendant was involved in a criminal conspiracy to fix prices for Batteries.

271. Because Defendants kept their conspiracy secret until at least June 28, 2011, neither Plaintiffs nor Nokia knew before then that Nokia was paying supracompetitive prices for Batteries.

272. On information and belief, Defendants successfully concealed their conspiratorial conduct by, among other things: making false public statements suggesting that the market for Cells and Batteries was competitive; directing their employees to destroy incriminating documents; undertaking to avoid creation of paper documentation of collusive activity; and agreeing to withhold from purchasers potentially incriminating information.

273. Defendants made numerous misleading public statements falsely portraying the market for Cells and Batteries as a competitive one. For example:

- a. In a February 2, 2004 presentation to investors entitled "2003 Business Results & 2004 Outlook," LG Chem declared its "[a]im to enter Top-tier [of the

rechargeable battery market] by '05 through expanding customer bases with product differentiation and preceding R&D.” In a section of the presentation titled “Competition Status,” LG Chem described the Battery market as “aggressive,” with its competitors focused on “capacity expansion,” “intensive investment,” and a “[s]trategy to sustain [a] leading position.” At the time LG Chem made these statements about the competitive state of the market it knew that they were false. LG Chem was a member of the conspiracy and knew that the Battery producers were not competing against each other aggressively but, rather, conspiring to avoid price competition.

- b. Panasonic stated in its 2005 Annual Report that, “[a]mid intensifying global competition in the rechargeable battery market, the Company focuses management resources on lithium-ion batteries.” In 2007, the company stated that “Matsushita’s business is subject to intense price competition worldwide. . . .” Panasonic knew when it made these statements that they were false because Defendants, who accounted for the vast majority of Lithium Ion Batteries sold worldwide, had previously agreed not to compete on price.
- c. In 2010, Panasonic stated that, “[w]e anticipate the harsh price competition with South Korean makers will continue. We are reviewing our production process to strengthen our cost competitiveness so that we can win the battle.” Similarly, a Sony spokesman stated in 2010 that “Sony anticipates a difficult environment for the battery business because of competition and price declines.” By 2010, these and other Japanese suppliers had agreed for more than a decade not to compete on price with Korean makers of Cells and Batteries.

274. Defendants also undertook to conceal their actions by instructing employees to destroy incriminating documents. For example, an internal LG Chem email dated February 26, 2004, that detailed a meeting that day between LG Chem and Sony executives concerning Battery pricing, stated “[p]lease discard after reading.” Similarly, an April 4, 2004 internal LG Chem email relating price-fixing conversations among Defendants implored: “please make sure that you maintain internal and

1 external security regarding the email, so that people other than the recipients on the list cannot access the  
2 email.”

3 275. Additional LG Chem emails detailing conspiratorial conversations and meetings among  
4 Defendants contained explicit instructions to “delete . . . upon reading,” “[p]lease share this email only  
5 with people on the recipients list, and delete it immediately upon reading,” and “[p]lease make sure that  
6 each related personnel takes a look at this mail and delete it.” Emails bearing such instructions were  
7 transmitted on at least the following dates: May 11, 2007, August 1, 2007, January 31, 2008, October  
8 13, 2008, and October 14, 2008.

9 276. Defendants further concealed their conduct by avoiding the creation of a paper trail in the  
10 first instance. A December 10, 2010 internal LG Chem email regarding price fixing with “D Company”  
11 stated, “when you have conversations with [D Company], never leave any written or evidence [sic].” In  
12 a February 15, 2011 LG Chem internal email chain also with regard to “D Company” (believed to be  
13 Samsung SDI), LG Chem executive J.H. Lee explained that “it seems our communication content is too  
14 direct.” Lee’s LG Chem colleague responded: “Well understood. And I will be careful about contact.”

15 277. In addition, Defendants jointly prohibited customer access to their Battery pricing  
16 formulas in order to conceal their price collusion and the pretextual nature of their price increase  
17 justifications. At a February 27, 2008 restaurant meeting between LG Chem and Sanyo, LG Chem  
18 emphasized that: “Regarding price increase, need to deliver a message again that the [pricing] formula  
19 should not be opened to customers.” Sanyo responded “positively” to LG Chem’s proposal to prevent  
20 customers from accessing the formula behind the price increases. Sanyo also confirmed to LG Chem  
21 that “Sony does not open [its] pricing formula to customers.”

22 278. Similarly, at a January 27, 2008 meeting between LG Chem and Sanyo at the Narita  
23 Airport, Sanyo inquired as to whether LG Chem “has an internal formula explained to customers at the  
24 time of price increase.” LG Chem then proposed that “each company’s confidential information, such as  
25 costs, should not be opened to the customers.”

26 279. As alleged in this Complaint, Defendants took other affirmative acts to conceal their  
27 wrongdoing, including offering pretextual justifications for collusive price increases; arranging  
28 clandestine meetings and phone calls among themselves to exchange pricing, production, and other

1 competitive, non-public information; using personal email accounts and coded messages when arranging  
 2 meetings; and on at least one occasion meeting in a private room at a restaurant so as not to be seen or  
 3 heard by others.

4 280. Defendants' anticompetitive conspiracy, by its very nature, was self-concealing. Cells  
 5 and Batteries are not exempt from antitrust regulation, and thus, before June 28, 2011, Plaintiffs and  
 6 Nokia reasonably considered it to be a competitive industry. Accordingly, a reasonable entity or person  
 7 under the circumstances would not have been alerted to begin to investigate the legitimacy of  
 8 Defendants' Lithium Ion Battery prices before June 28, 2011.

9 281. Plaintiffs and Nokia exercised reasonable diligence. Neither Plaintiffs nor Nokia could  
 10 have discovered the alleged conspiracy at an earlier date by the exercise of reasonable diligence because  
 11 of the deceptive practices and techniques of secrecy employed by Defendants and their Co-Conspirators  
 12 to conceal their combination.

13 282. As a result of Defendants' concealment, the running of any statute of limitations has been  
 14 tolled with respect to any claims that Plaintiffs allege in this Complaint.

15 283. In addition, the running of any statute of limitations had been tolled with respect to any  
 16 claims that Plaintiffs allege in this Complaint as of October 3, 2012—the filing of the earliest complaint  
 17 that is now part of the Direct Purchaser Plaintiff class in the MDL—because, as an unnamed party of an  
 18 asserted class, Plaintiffs receive the benefit of tolling under *American Pipe & Construction Co. v. Utah*,  
 19 414 U.S. 538 (1974).

## 20 **N. VIOLATIONS OF SHERMAN ACT**

21 284. Plaintiffs incorporate and reallege, as though fully set forth herein, each and every  
 22 allegation set forth in the preceding paragraphs of this Complaint.

23 285. At least as early as January 2000, and continuing until at least May 2011, the exact dates  
 24 being unknown to Plaintiffs, Defendants and their Co-Conspirators entered into a continuing agreement,  
 25 understanding, and conspiracy in restraint of trade to artificially fix, raise, stabilize, and maintain prices  
 26 for Cells and Batteries in the United States in violation of Section 1 of the Sherman Act, 15 U.S.C. §1.  
 27  
 28



286. In formulating and carrying out the alleged agreement, understanding, and conspiracy, Defendants and their Co-Conspirators did those things that they combined and conspired to do, including but not limited to the acts, practices, and course of conduct set forth above, to achieve the following results, among others:

- a. To fix, raise, maintain, and stabilize the price of Cells and Batteries;
- b. To allocate the market for Cells and Batteries between and among Defendants;  
and
- c. To restrict output of Cells and Batteries.

287. The combination and conspiracy alleged herein has had the following effects, among others:

- a. Price competition in the market for Cells and Batteries has been restrained, suppressed, and/or eliminated in the United States;
- b. Prices for Cells and Batteries sold by Defendants, their divisions, subsidiaries, and affiliates, and their Co-Conspirators have been fixed, raised, stabilized, and maintained at artificially high, non-competitive levels throughout the United States; and
- c. Plaintiffs and Nokia, having purchased Batteries from Defendants, their divisions, subsidiaries, and affiliates, and their Co-Conspirators, have been deprived of the benefits of free and open competition.

288. Plaintiffs and Nokia have been injured in their business and property by paying more for Batteries purchased from Defendants, their Co-Conspirators, and others than they would have paid and will pay in the absence of the combination and conspiracy.

289. Defendants' and their Co-Conspirators' conduct involved United States import trade or commerce and/or had a direct, substantial, and reasonably foreseeable effect on United States domestic and import trade or commerce that resulted in the injuries suffered by Plaintiffs and Nokia and gave rise to Plaintiffs' antitrust claims. As a result, Plaintiffs and Nokia have suffered injury as a direct, proximate, and reasonably foreseeable result of Defendants' conspiracy to fix the price of Cells and Batteries.

290. Plaintiffs and Nokia have been injured and will continue to be injured in their business and property by paying more for Batteries purchased from Defendants and their Co-Conspirators than they would have paid and will pay in the absence of the combination and conspiracy.

291. Because Plaintiffs and Nokia have suffered injury as a direct, proximate, and foreseeable result of Defendants' and their Co-Conspirators' conspiracy to fix the price of Cells and Batteries, Plaintiffs are entitled to damages under Section 4 of the Clayton Act, 15 U.S.C. § 15, for their purchases of Batteries produced by Defendants, their Co-Conspirators, and others.

#### **O. PRAYER FOR RELIEF**

WHEREFORE, Plaintiffs request:

A. That Defendants' unlawful agreement, conduct, contract, conspiracy, or combination alleged herein be adjudged and decreed to be a restraint of trade or commerce in violation of Section 1 of the Sherman Act, 15 U.S.C. § 1, as alleged in the First Claim for Relief.

B. That Plaintiffs recover damages, as provided by all applicable antitrust laws, and that a judgment be entered in favor of Plaintiffs against Defendants, jointly and severally, in an amount to be trebled in accordance with such laws;

C. That Defendants, their affiliates, successors, transferees, assignees, and the officers, directors, partners, agents, and employees thereof, and all other persons acting or claiming to act on their behalf, be permanently enjoined and restrained from in any manner continuing, maintaining, or renewing the conduct, contract, conspiracy, or combination alleged herein, or from entering into any other conspiracy or combination having a similar purpose or effect, and from adopting or following any practice, plan, program, or device having a similar purpose or effect;

D. That Plaintiffs be awarded pre- and post-judgment interest, and that such interest be awarded at the highest legal rate from and after the date of service of the Complaint in this action;

E. That Plaintiffs recover their costs and disbursements of this suit, including reasonable attorneys' fees as provided by law; and

F. That Plaintiffs be awarded such other, further, and different relief as the case may require and the Court may deem just and proper under the circumstances.

1 Date: June 26, 2015

2  
3 /s/ Lance A. Termes

4 Lance A. Termes

5 **ALSTON & BIRD LLP**

6 Wa. Bar No. 29729

7 1950 University Avenue, 5th Floor

8 East Palo Alto, CA 94303-2282

9 Telephone: (650) 838-2000

10 Facsimile: (650) 838-2001

11 Email: lance.termes@alston.com

12 James C. Grant (*Pending Pro Hac Vice Admission*)

13 Valarie C. Williams(*Pending Pro Hac Vice*  
14 *Admission*)

15 B. Parker Miller (*Pending Pro Hac Vice Admission*)

16 Edward P. Bonapfel (*Pending Pro Hac Vice*  
17 *Admission*)

18 **ALSTON & BIRD LLP**

19 1201 West Peachtree Street

20 Atlanta, Georgia 30309

21 Telephone: (404) 881-7000

22 Facsimile: (404) 881-7777

23 Email: jim.grant@alston.com

24 valarie.williams@alston.com

25 parker.miller@alston.com

26 ed.bonapfel@alston.com

27 *Attorneys for Plaintiffs Microsoft Mobile Inc.*  
28 *and Microsoft Mobile Oy*

**DEMAND FOR JURY TRIAL**

Plaintiffs Microsoft Mobile Inc. and Microsoft Mobile Oy hereby demand a jury trial for all issues so triable.

Date: June 26, 2015

/s/ Lance A. Termes

Lance A. Termes

**ALSTON & BIRD LLP**

Wa. Bar No. 29729

1950 University Avenue, 5th Floor

East Palo Alto, CA 94303-2282

Telephone: (650) 838-2000

Facsimile: (650) 838-2001

Email: lance.termes@alston.com

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B. Parker Miller (*Pending Pro Hac Vice Admission*)

Edward P. Bonapfel (*Pending Pro Hac Vice Admission*)

**ALSTON & BIRD LLP**

1201 West Peachtree Street

Atlanta, Georgia 30309

Telephone: (404) 881-7000

Facsimile: (404) 881-7777

Email: jim.grant@alston.com

valarie.williams@alston.com

parker.miller@alston.com

ed.bonapfel@alston.com

***Attorneys for Plaintiffs Microsoft Mobile Inc.  
and Microsoft Mobile Oy***